

Heinzelmann W. The German-Jewish paediatrician Albert Eckstein (1891-1950) exiled to Turkey: Pioneering modern paediatric care and social hygiene (health sciences) during World War II (Review article). SEEJPH 2015, posted: 18 January 2015. DOI 10.12908/SEEJPH-2014-37

REVIEW ARTICLE

The German-Jewish paediatrician Albert Eckstein (1891-1950) exiled to Turkey: Pioneering modern paediatric care and social hygiene (health sciences) during World War II

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Abstract

During the thirties of the twentieth century, German medical doctors immigrated to Turkey. Among them, was the German-Jewish paediatrician Albert Eckstein. In this short biography, the richness of the literature, written by or about Eckstein, will be presented, and altogether combined.

Starting from 1937 and further on, Albert Eckstein undertook scientific surveys on children's state of health and health care in the most remote areas of Anatolia. The value of the social-hygienic approach could be recognized, even in this early stage, starting with epidemiological analysis and followed by basic comprehensive health care. Social hygiene, as a young branch of health sciences at the time, was in the position even then to model the health care system for large population groups, at least in countries actively developing health care, as was Turkey of that time.

Albert Eckstein and his co-workers, such as Ihsan Dogramaci, stand out as founders of the modern Turkish health care system today and health sciences in this country.

Keywords: Albert Eckstein, Anatolia, health sciences, Ihsan Dogramaci, paediatrics, public health, social hygiene.

Conflict of interest: None.

Acknowledgement: The support by Prof. Ulrich Laaser and the translation by Dr. Nikola Ilic are gratefully acknowledged.

Introduction

During the great remodelling of the Turkish nation under the government of Kemal Atatürk (1881-1938), the German-Jewish physician and emigrant Albert Eckstein (1891-1950), also often mentioned as “*Architect of the modern Turkish health-care system*” (1), made significant efforts in lowering child mortality. At the end of 1920s, the German scientist Gerhard Domagk had discovered the healing effects of *sulfonamide* and started the era of chemotherapy. He was awarded the Nobel Prize in Medicine in 1939. Albert Eckstein left his homeland under pursue from national-socialists in 1935, with Domagk’s new therapeutic instruments in his luggage and headed for Ankara, the emerging capital of modern Turkey, which at that time was a country with high child mortality.

Biographical background

In the years before Eckstein arrived to Ankara, he had finished studies in the elite German medical schools. He worked during his medical studies with Johannes von Kries and Eugen Fisher on scientific research in the Freiburg Institute of Physiology and Anatomy. After 1920, Eckstein turned his interests to Paediatrics and obtained a degree in this field three years later under Carl Noeggerath in Freiburg. Since 1925, Eckstein worked for years as a senior medical doctor under the social-hygienist Arthur Schlossmann in the Paediatric Clinic at the Medical Academy in Düsseldorf. The textbook on Social Hygiene and Medical Care edited by Arthur Schlossmann together with the most famous social-hygienists Adolf Gottstein and Ludwig Teleky in the midst of the twenties, was a milestone in developing modern health sciences (2), thus supplying young German doctors with the latest scientific findings on those newly endeavoured fields.

The young researcher we are speaking of found entrance to his director’s family through marriage with his daughter Dr. Erna Schlossmann. She led the Auguste-Viktoria Children’s Home, and was also engaged in social hygiene. In the times coming, she will be of great help as associate on his undertakings in exile. Being associated professor with Schlossmann since 1925, Eckstein was the permanent deputy of his father in law and – after his master’s death in 1932 – he followed him both on clinical and academic positions¹ (3-6). Until 1935, Eckstein worked on infective diseases and tuberculosis and wrote a chapter on smallpox for the Textbook of Internal Medicine (7).

Historical background

Basically, one can explain Eckstein’s path, a paradox turn in the carrier of this 45 year old man, through two historical phenomena: Anti-Semitism in Germany on one side, and government and community reconstruction in Turkey of the period, on the other. Already in 1924, Kemal Atatürk signed a Treaty of Friendship with Germany and a second one followed in 1941 (4). Following the “Seizure of Power” in 1933, Eckstein managed to stay only two and a half years more at his workplace in Düsseldorf. After a year of harassment and humiliation by the regime, colleagues, and students, a decree signed by Hitler and Göring forced him to leave Germany (3). In those years, Germany and Turkey were working together under an agreement on helping the young (Turkish) republic on rebuilding new government structures and forming the University in Istanbul and a new University in Ankara (4). Through this programme, in which Germans without Jewish roots could work as well, national-socialists let high-profiled German-Jewish scientists seek exile in Turkey (3,8).

¹ Erichsen R (2012) Exil Tuerkei: Der Pädiater Albert Eckstein – wie er aus Deutschland vertrieben wurde und was er in die Tuerkei mitbrachte; and: Erichsen R (2012) Zwei Pädiater im tuerkischen Exil: Erna und Albert Eckstein halfen Kindern im ländlichen Anatolien und fotografierten ihre Welt. Deutsch-Tuerkische Gesellschaft (DTG), Bonn 03.05.2012.

Eckstein was “*the last Jewish professor at the Medical Academy in Düsseldorf*” (4,9). Within a few weeks, Eckstein arranged with the Turkish government that he would be assigned first as “*Head of the Paediatric Department in the city hospital Nümune Hastanesi in Ankara*” (4), the only hospital in Ankara with its population of 125,000 residents (10). Later, in 1945, he advanced to a full professor of Paediatrics and Director of the Paediatric Clinic in the newly formed University. Eckstein developed from earlier, small-scale medical scientific projects, the largest social-hygienic project of the time – an analysis of infant and small children care in Turkey with its population of then 16 million (11).

Research in rural Anatolia

After the reorganisation of the newly established University Paediatric Clinic in Ankara (4) the couple Eckstein went twice in the period from 1936 to 1938 on three-month voyages through regions of west and central Anatolia, accompanied by their Turkish assistant Dr. Salahaddin Cevdet Tekand (see below) (5,11). They tended especially to pass the rural areas and reach “*the remotest villages*” where men, mothers, wives, and children “*have never seen medical doctors*” (12,13). The workgroup undertook systematic scientific investigations and offered “*on the spot*” medical care for those in need. The procedure corresponded to a classical demographic and statistical survey, which led to an epidemiology of childhood diseases in Anatolia as basis for the creation of a comprehensive paediatric health care system (4,5,11). As in some of the visited provinces survey techniques could not be fully used, the solution was found in the “*monographic, exemplary description of single villages*” (5,14). The mutual relationship between the state of health of the individual and the population, a typical case of the social-hygienic double perspective (15), could be found here as a model for the first time in a project on large-scale.

The Turkish Health Minister Refik Saydam, later also Turkish Prime Minister, became friend with Eckstein and agreed that Eckstein visited first the rural areas and produced a report on illness and health among children of Anatolia as a basis for reform proposals: “*I would like you to prepare a report on children’s health and diseases in Turkey However a German approach may not be suitable for our country Visit and examine all of Anatolia and (return) with your proposals*” (10,16,17).

According to Akar (1), malaria and necrotic ulcerative stomatitis or Noma were the major illnesses for the paediatrician in Turkey to treat. Whereas for malaria prophylaxis as well as therapy was available, Noma required the treatment of the mucous membrane of the mouth in children with a weak immune system and malnutrition, sometimes showing also progressive facial necrosis, which represented a daunting therapeutic challenge (18). The list of illnesses comprised in addition: diarrhoea, malnutrition, rickets, typhoid fever, tuberculosis, gonorrhoea, ascariasis, anaemia, trachoma, measles, bronchitis, injuries, scarlet fever, and diphtheria (4,5,11). Eckstein’s inquiry in locally typical disease manifestations included basic social-hygienic data as diet, quality of water, hygienic habits, care for infants, and social status. Observations were recorded in “*detailed daily journals*” (3), as a prerequisite for developing new structures of medical care (5).

The research trips led Eckstein and his small team especially into the central and western regions of Anatolia. During only two years, they visited altogether 188 villages in 25 provinces, interviewing almost 25.000 women (4,5,11). The examination began usually with social-hygienic and demographic, and population data gathering. Furthermore, the group studied the dominating diseases and the social conditions determining the rural environment in which families in Anatolia typically lived (11), with a special focus on childhood diseases. Living conditions and living standards (water and milk supply, fruit and vegetable growing) of the rural population stayed regularly in focus. The so-called “*Centres for fighting malaria*”

(4,5) were transformed into Health Centers (Dispensaires) that provided consultations for mothers and health care for infants and, as such, formed footing for the future paediatric services (4,5).

Diarrheic diseases were – different from Western Europe – predominantly of bacterial origin, therefore, diarrhoea during the summer months required antibacterial medication (sulfonamide), or serum therapy (3,4). Because of Eckstein's work before he returned to Germany in 1949, the mortality among children in Turkey decreased from 35%-40% to 12% (4,5,10,13). However, the Ecksteins themselves indicated some statistical weaknesses in this account (4,13).

Workday routine

How a typical workday for the two Ecksteins looked like, we can see from the 44 page daily journal covering their visit to Anatolia in 1937, published in 2005 by Buerger (19). The Ecksteins needed not to get alone on the road through undeveloped parts of the land in order to reach mothers and children who lived in villages there. For transportation they used one Ford cabriolet, bus lines, railroad, Taurus-express, occasionally with sleeping car. But, they also travelled “*using taxi, jeep, or horse*” (12). Primarily, Albert Eckstein described the strange remains of antic architecture spread throughout an ever changing landscape, its utilization, management, climate, living conditions, the diet of the population, conditions of accommodation, occupations, and standards of living. Often he used the hospitality of the population in Anatolia as advantage in building his own social network in the field. There were rarely days that would end without celebrations of new friendships. Almost everywhere they were received by higher health service representatives, who would take them to residential areas. First ones to come to him were children, followed by women who openly showed their empathy, and at the end came the sick. The social-hygienic research work started latest at 11:00 in the morning and lasted until late involving visits, tuberculin vaccinations and their controls, gathering data on birth rates and child mortality, after that “polyclinic consultations” for malaria treatment including quinine prophylaxis for enteritis, rickets, ascariasis, measles, and whooping cough.

Eckstein's personality

It is out of question that this highly engaged and charismatic paediatrician with his efficient work and approach to people also won the hearts and managed to generate deep empathy by the population Eckstein worked with. Even today, Eckstein's name is mentioned in Ankara and Istanbul (20). The extraordinary personality as observed by his Turkish colleagues and patients, his energy and happiness in life, genius, and a feeling for the right moment, eidetic disposition (descriptive representation of the undertaken voyages, surprisingly changing scenery of landscapes in Anatolia), incredible memory, adaptability, promptness of his thoughts and team spirit. Dr. Salahaddin Cevded Tekand pointed out in 1998 that those who spoke about Eckstein always indicate his success, while he was referring always to “us” (16,17). The “enthusiastic doctor” managed to combine two things together “*that made him very popular and beloved*”: his “calm responsibility” and “affectionate way” in which he was treating both children and parents (21). Their children along with other children in Ankara were vaccinated against smallpox, measles, typhus, received therapy for malaria or prophylaxis with quinine, and sulfonamide for diarrhoea. Jülide Gülizar was explicit when she in the Cumhuriyet magazine expressed her feelings: “*He left behind a lot of research and studies about Turkish children and the special throne he built in the hearts of their mothers*” (10). Typical for the deeply grateful Turkish people was the triumphal farewell which Eckstein's fans organised in 1950 at Ankara's central train station. Just before the departure of

the train “Hundreds of Turkish people, many of them with babies and children in arms, came to the train station, one more time to wave him farewell”. As reported later in the magazine, this was one of the greatest “red carpet treatment” Ankara had experienced ever (13). As Turkey declared war against Germany in February 1945, all Germans in the country were interned, only Eckstein and his family escaped this measure because of his previous remarkable services (3).

Eckstein’s Turkish assistants

The Turkish state realised the contractual agreements of hiring additional hands very reluctantly and attached assistants only one by one. In their historical sequence (Dr.’s): Bahtiyar Demirag, who from 1950 on carried forward the work of his teacher in Ankara (10); Neriman Olgür (16,17) and Sabiha Cura (10), just like Selahattin Cevded Tekand and Ihsan Dogramaci (see for both below). Eckstein met Ihsan Dogramaci (1915-2010) by chance during his “Anatolian voyage” in 1938. The tall young doctor grew up in the highest society, was nephew to the local governor, and lived in the governor’s palace. This is where he received and hosted Eckstein with his co-workers. Upon return, Eckstein invited him to accompany them as a paediatrician on a five-day research trip through the province and to become a paediatrician (10,13,16,17). After this trip, the young Ihsan Dogramaci became the third in the row of Turkish assistants; later, he worked as a clinician in Ankara. Ihsan stayed in this position until 1940 when he went on his way to the United States and Baghdad (10). One year later, signed with both names, the essay on “*Treatment of summer diarrhoea with bacteriophages*” was published (22), which was a result of joint research work in the new capital of Turkey. After that, the Turkish paediatrician stayed some more time in Washington D.C. and Boston for studies from which he returned in 1949 to Ankara for postdoctoral studies. Dogramaci obviously like other friends shared the enthusiasm of his teacher for the appropriation of his new homeland by photography and film (5)². He played an important role as a professor in instituting the new university. He was founder of the Hacettepe university clinic in 1958 (which later became part of the university bearing the same name) (16) and in 1984 of the private Bilkent University (10), “*the first full-fledged private university in Turkey*” (17), both of those in Ankara, a city with three universities in total (19). By the end of the fifties of the last century, the German-Jewish paediatrician and his “former student” (Figure 1) stood among the most prominent persons, founders of the new institutions in Ankara.

Eckstein already tried to provide safe and sustained care for children in the entire Middle East by building the powdered milk factory in eastern Turkey (4). Later, it was Dogramaci who provided this milk distribution in Turkey and thus was able to considerably decrease the infant and child mortality in his country. The friendship between the two German and Turkish paediatricians went even further: in 1954, almost two decades after his first assistant position, Dogramaci gave to Dr. Erna Eckstein-Schlossmann the administrative position in the new Hacettepe Paediatric Clinic, responsible for equipping the facilities. That led to the return of Eckstein’s widow Erna Eckstein-Schlossmann to Ankara where she stayed for the next five years until 1961 (4,6). The Lifetime Achievement Award, which was awarded to Dogramaci in Istanbul in 2009 at the 12th World Congress of Public Health by the World Federation of Public Health Associations (WFPHA), came – after numerous earlier awards – as a last point after the extraordinary work of this great man (20).

² Dogramaci, Burzu: Die Aneignung der Exil-Heimat durch Photographie und Film. Vortrag gehalten bei der Konrad-Adenauer-Stiftung, Bonn am 22. September 1968.

Figure 1. Dr. Eckstein and Dr. Dogramaci
(Screenshot taken from: <http://www.ep.liu.se/ej/hygiea/v7/i1/a3/hygiea08v7i1a3.pdf>)



Eckstein's first Turkish assistant was his "travelling assistant", namely Dr. Salahaddin Cevdet Tekand. Although his professional career did not compare to Dogramaci, Eckstein had to rely especially during his travelling through the rural provinces on his francophone assistant (13) and gave him credit for part of his success (19), especially with regard to the establishment of easy contacts with the Turkish peasants and their "warm" and "often touching" hospitality. Tekand gathered over the years as a field doctor an impressive array of experiences. He became the head of the Paediatric Clinic in his hometown Izmir and worked there on children welfare programmes until 1997 (19).

The scientific work

The main question we are interested in here is whether we can agree with the claim made by Henry Sigerist in 1947 that findings and work of social-hygienic assailants acted worldwide as an accelerator in the development of health sciences (23). The unprecedented successes of Eckstein prove that the amended social-hygienic model that he used had the potential for population wide health care. Using this approach experts displaced from Germany triggered innovations in the health services of their host countries.

The essential factor for success of the assailants in the field of social-hygiene was the developmental status of the target countries. Many of these were countries under development such as Turkey, Palestine, and Latin America, where they could use their know-how in health sciences. On the other hand, they failed to achieve the same in industrialised developed countries, mostly because of the high professional competition. Two factors were predominant in decision making of the German-Jewish assailants: the degree of persecution in Germany and the legislation regulating the medical profession in host countries. Eckstein was

afraid of the lack of social security in the US, wherefrom he got an invitation, but he was not afraid of the need to learn Turkish. That was a new and strange language, in which he soon wrote a textbook, the first textbook in Turkish on infant diseases (3). Eckstein was led by a powerful urge to write. During almost 15 years in Turkey, during long working days, on the road, along with never ending planning, helping, creating new guidelines, and organising other staff, he wrote 50 publications. Many of those publications are even today relevant due to their clarity and realism. Many of the data in these publications originated from the comprehensive research which started in 1940.

In Turkey, the still undeveloped country at the gates of Asia, he was always following his favourite thesis about “quite different, non-textbook conditions” of otherwise well known paediatric diseases, especially in the rural villages they visited on their trips: *“Diseases and their forms show partially a different course from those we can find described in our textbooks. Other diseases - such as the examples of malaria or necrotic ulcerative stomatitis - can confront the paediatrician with the task, to find new ways as... the specificities of childhood must be taken into account”* (19). Insight in scientific gains made by Eckstein on his voyages could be seen in his monograph “Malaria in childhood” (24), published in 1946. On the front page of this publication the author and professor in Ankara described himself, 11 years after his flight from Germany, still as *“former full professor... at the Medical Academy in Düsseldorf”*. Here he dedicated a 100-page chapter of the text to Arthur Schlossmann. The text was written on never before systematically described forms of diseases, here “non-textbook” forms of malaria among children that Eckstein learned to diagnose and treat during the decade he travelled deeply into the Turkish countryside. Unusual forms of malaria among children revealed occasionally just strong thirst or insomnia with strange behaviour and consciousness disorders. Lethality was strangely high and made up for a large part of total mortality in the population. Child mortality from diarrhoea could be largely reduced in malaria regions through “energetic treatment” with anti-malarial drugs. With 90 case reports, Eckstein showed some common childhood diseases with symptoms, temperature charts, differential diagnoses, congenital illness, and malaria among infants, complications, protracted and foudroyant coma, recurrence, combinations with other diseases, especially with typhus abdominalis and tuberculosis, chronic malaria, consequences and therapy. Even more, he compiled *“more than 1000 clinical observations of interest”* from his survey research. Already in one earlier publication “Encephalitis in the children’s age”, published in 1929 (25), he collected with the same objective different forms of encephalitis among children and how they were described in the literature. This was a compilation of new observations which contributed to the understanding of encephalitis among children, to be distinguished from the clinical picture in adults. As an example, during chronic encephalitis in adults, physical changes manifest as immobility and lethargy, while among children and young people different types of asocial behaviour can be found. Almost all cases of acute encephalitis among children lead to incomplete healing and transfer over time into chronic forms of illness.

Concluding remark

For 14 years, Eckstein lived and worked in Ankara. After 1945, for the successful assailant, the question of remigration appeared. A number of honours from post-war Germany indicated that Eckstein not only was remembered, but he was also needed. The Medical Academy in Düsseldorf awarded Eckstein the honourable citizenship in 1948 (9,26), and that same university as well as four other German universities offered him a full university professorship in paediatrics. At the end, Eckstein accepted the sixth offer from Hamburg. His inaugural lecture covered the theme *“Problems of paediatric care in Turkey”* (3,4). In 1949,

Albert Eckstein came back to Germany [no more than 5% of the German-Jewish émigrés returned to the country of their origin (27)], but one year later he died at the age of 59. Among the exiled German-Jewish professors, Eckstein was the most outstanding professional in the field of social-hygiene and early health sciences, and vice versa, he was its classical product – if one can say so. Eckstein stands among the assailed scientists in Turkey as “*grotesque deviation of history*” to those who most impressively reflected back the “*shameful expulsion*” (28).

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