# **COMMENTARY**

# Age limitation for organ transplantation: the Israeli example

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## **Abstract**

In 2013 the Israeli Ministry of Health appointed a public committee to examine the policy of placing an age limitation on candidates listed for organ transplantation. The committee rejected the use of an age limit criterion for listing candidates for transplantation and recommended to abolish it. However, opinions differed regarding the use of recipients' age in shaping a fair organ allocation policy. The committee's recommendations were adopted and put into force as of April 2014. This article unfolds the committee deliberations on accommodating values of formal equality for optimising the use of organ transplantation.

**Keywords:** older people, organ transplantation, age limit, Israel

### Introduction

Organ donation and transplantation practices vary widely across the globe [1]. Despite the fact that many countries have abolished recipients' chronological age as a formal limitation criterion for listing for transplantation, the recipients' age is still very relevant. However, the relevance of age and the way in which it is taken into account varies significantly between different countries [2].

The policies of the Israeli National Transplant Center have traditionally limited listing candidates for the various transplanted organs by maximal age criteria, mainly due to shortage in donated organs. Following public criticism of this seeming discriminative rationing, in 2013 the Ministry of Health appointed a committee to examine the use of chronological age criterion for inclusion in the organ transplantation waiting list and for organ allocation policy.

In this commentary we present the main medical, ethical and legal issues of using an age limit as a criterion for listing for transplantation, as discussed by the committee, and present its recommendations. This descriptive analysis will allow better understanding of the existing challenges to balance between the value of equality and the optimal use of the scarce resources such as donated organs, which is shared today by many countries in the context of an ageing world.

# The age criterion in organ transplantation in Israel

In Israel, organ transplantation is governed by the Organ Transplant Law of 2008 [3]. All donor management and organ allocation is centrally coordinated by the Israel National Transplant Center (INTC), which was established

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in 1994 as a department within the Ministry of Health. Faced with a constant shortage of donated organs, the INTC implemented different policies to increase deceased and living organ donations. Maximum age limit for transplant candidacy was one of the foremost rationing measures included by the INTC.

In specific, registration for heart transplant was limited for candidates up to the age of 65, with those aged 65-75 being registered in an alternative waiting list for the transplant of a marginal organ. Registration for a lung transplant was approved up to the age of 65, with the possibility of registering in an alternative list up to the age of 70. Two lists were made for registration for a liver transplant based on different scoring systems: for children up to 18 years of age and for adults up to 67 years. Finally, no formal age limit criteria was set for kidney transplant; however, a maximum allocation score was given to candidates up to the age of 18, which declined linearly until it reached zero at the age of 60, in order to avoid irreversible complications of chronic renal failure in the young, such as growth retardation or infertility. To counterweight, candidates for kidney transplant over the age of 60 were given priority in organ allocation of kidneys from donors over the age of 60.

In 2013, a committee was appointed by the Ministry of Health to examine the age criterion for inclusion in the organ transplantation waiting lists. The committee comprised 25 members, from diverse and multi-disciplinary backgrounds, and from a wide range of age groups, including physicians, lawyers, sociologists, gerontologists, psychologists, as well as representatives of older persons' associations, and representatives of candidates for organ transplantation. In addition, the committee sought the public opinions by publicised invitations to appear in front of it and to submit views and policy positions.

## **Medical considerations**

The committee first requested its transplant experts to review clinical data based on impact of recipients' age on outcome in the various transplanted organs. Although significant negative correlations between recipients' chronological age and post-transplant patient survival are evident for all organ recipients, the transplant experts did not consider the magnitude of survival differences among the various age groups to solely justify exclusion from the candidates' waiting lists [4–6]. The transplant experts thus recommended that eligibility of candidates for organ transplantation should be considered on an individual basis and not according to a rigid chronological age limit. Given this recommendation, the committee addressed the ethical, social and legal issues stemming from the exclusion of the older persons from the list of transplant candidates.

# **Ethical considerations**

The utilitarian approach to the issue (i.e. an approach with focus on the 'utility' of the outcome of ones' behaviour),

justifies limiting the maximal age of transplant candidacy on the basis of maximising the use value of the transplanted organ. Callahan's 'natural life span' approach leads to an understanding that age can and should be used as a dividing line when deciding on allocating health resources (including organ transplants) [7]. According to this approach, a formalistic decision regarding age will determine whether a person will receive a transplant or not. This approach is based on the assumption that older persons have completed a good portion of their life expectancy, and accordingly, one should prioritise the young who have yet to enjoy this. The committee has deemed this approach as incompatible with the changes in the social and legal perception in Israel, and sought to establish a more egalitarian and just approach [8].

Furthermore, the committee did not find the statistically significant but small differences in long-term survival between young and old organ recipients sufficient to justify absolute exclusion of the latter from the transplant candidates' list. In a situation in which every candidate is examined on an individual basis, there is no point in an exclusionary rule on a basis of age which entirely relies on generalised statistical assumptions rather than particular examination of the patient under consideration [9].

Another argument taken into account by the committee in favour of the abolition of the age threshold was the principle of reciprocity or mutual responsibility underlying altruistic organ donation. As such, society should make sure that transplantation-related decisions take into account potential donors' interests, expectations and feelings. The high rate of old people among organ donors may represent a violation of the principle of reciprocity between donors [10] and recipients if people of their age are not entitled to receive organs.

# Recipients' age as a criterion in organ allocation

Moving beyond age as an exclusionary rule, opinions in the committee differed regarding the use of recipients' age as an additional relevant criterion in shaping a fair and objective organ allocation policy. The dispute regarding prioritisation of younger organ transplant candidates over older ones in organ allocation is not new. The argument between Harris [11] and Kappel and Sandoe [12], who claim for and against preference for young people in this context, is particularly well known.

The majority opinion in the committee was that recipients' age by itself should not be considered during organ allocation. In this sense, chronological age, in and by itself, should not be a factor at all. The concerns of committee members pertained to the fear of assigning value to each year of life, and the subsequent decision that some people are 'worth more' and some are 'worth less'. Assigning value to recipient and organ life expectancy is, according to the majority opinion, an unrealistic task that neutralises all those 'life events' that unavoidably intervene in the course of life.

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The minority position on the other hand argued that chronological age should be considered as one, of many, allocation considerations. This position relied on two main reasons: one is the cycle of life—there is significance to the years a person has already lived and to those he is expected to live (even if this is only according to the statistical life expectancy); and the second is the significance of the number of years the donated organ, as a public resource, will serve its recipient. Those of the minority opinion observed that a week of life is not the same as a year of life, and one year of life cannot be compared to a decade. Accordingly, the minority position suggested determining an allocation formula that affords a certain weight to the age of the transplant candidate even if only in the sense of a 'tie breaker' when all the other medical-health data is identical.

### Conclusion

Across the globe, societies are struggling to shape their practices and policies regarding organ donation and transplantation. This dynamic reality is evolving as the world ages and ageism is being recognised and fought against. The Israeli experience, as described above, exemplified this complicated reality: it was centred on the Israeli population's ageing as well as on the shift in norms and values in the society. The Israeli committee recommended, therefore, for the abolition of age as an excluding criterion for listing candidates for transplants, and thus joined the existing trend in most Western countries. Also, by its majority's position, the committee recommended ignoring recipients' chronological age in organ allocation, as long as there is no medical cause for differentiation on the basis of age. The steering committee of the INTC and the Ministry of Health in Israel have approved the committee's recommendations and, following notification of the public by the media, it was implemented as of April 2014. It is for future studies to assess the impact of these recommendations on the reality and experience of organ transplantation in Israel.

# **Keypoints**

- The weight given to the recipient's age is a controversial variable in organ transplantation policy.
- In Israel, a committee established in 2013, recommended to abolish age as a disqualifying criteria for organ transplantation.
- However, major disagreement arose regarding the weight and relevance age should be given in organ transplantation policy.
- The committee's majority opinion was to totally ignore the recipient's chronological age.
- Future research needs to evaluate the impact of 'age-neutral' policy on the reality of transplantation.

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## **Conflicts of interest**

None declared.

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