

平成27年度

愛媛大学医学部一般入試（前期日程）試験問題

外国語(医学科)

(14:10~16:10)

注意事項

- (1) 試験開始の合図があるまでは、次の頁を開いてはいけません。
- (2) 解答は、解答用紙の指定のところに横書きすること。
- (3) 受験番号は、解答用紙1枚ごとに、欄内に算用数字で横書きすること。
- (4) 問題冊子は、表紙を含めて8枚、解答用紙は4枚あります。

問題 1. 次の文章を読み、後の設問に答えなさい。なお、「*」のついた単語については本文の後に語注がついているので参考にしなさい。

I began working with children with *leukaemia in 1982 when cure rates rose and hopes were high that if a child was diagnosed with leukaemia, he or she could survive the disease. It was not long before that when leukaemia was almost inevitably fatal. Before the late 1960s and early 1970s, less than 20 percent of the children survived leukaemia for more than two years. Consequently, the child with leukaemia was treated as a dying child from diagnosis onwards. The survival rates increased as a result of the combined application of *radiotherapy and *chemotherapy. Further improvement was achieved by more aggressive and intensive treatment protocols, and in the 1980s, 60 to 70 percent of the children survived their disease for more than five years. In less than 20 years, a spectacular improvement of the survival rates for children with leukaemia was accomplished. With contemporary treatment protocols, as many as 75 to 85 percent of these children survive.

Along with the progress in medical treatment, childhood leukaemia changed from an acute fatal illness, into a chronic life-threatening disease but with a real chance for cure. Instead (a) adapting to the *imminence of death, the psychological focus shifted on living with leukaemia and planning for an uncertain future. Therefore, if children had a real chance of survival, it was important that they should be able to go on (b) their lives once they were cured. Because a child's development does not stop with a diagnosis of leukaemia, the objective became the maintenance of as many aspects of normal day-to-day functioning as possible. Treating children with leukaemia as "normally" as possible in every aspect of their life became a key objective, which also implies that the child should stay in his or her natural environment, that is to say, (A), as much as possible during treatment. This resulted (c) shortened hospital stays and the implementation of treatment on an *outpatient basis. To achieve this goal, parents became a part of the healthcare team and were taught to give the necessary care and medication to their child at home.

Normal life and planning for a child's future also means going to school and having interactions (d) peers. Just as parents needed to be taught that their child had a real chance to live on, teachers now had to be informed about the improved prognosis. An important prejudice that had to be dispelled was their fear that the child could suddenly die in their classroom. After removing uncertainties about the disease and informing teachers about the emotional needs of these children, emphasising that they need to be dealt with in the same manner as any other child, they were welcomed back into the classroom. This is a ①very anxious time for parents because the treatment of leukaemia suppresses the child's immune system and therefore otherwise *innocuous or mild infectious diseases in healthy children such as *chicken pox can be fatal. Nevertheless, most parents were brave and let their child go to school and take part in outdoor activities while taking all sorts of precautions. Others kept their child at home as much as possible, thereby isolating the child for the length of the treatment which at that time lasted two years. ②Understandably, parents felt

confronted with the choice between life and death on the one hand and a normal development on the other.

As more and more children survived their disease, however, ③the costs of cure gradually became apparent. The *rigorous treatment necessary to *eradicate leukaemic cells also affects normal cells. An increasing number of studies appeared in the literature that reported late medical side effects, such as disorders in growth and *puberty, *neuropsychological deficits including a decline in IQ and learning difficulties, *dysfunction of the heart, lungs and kidneys and secondary *malignancies. Some side effects also have cosmetic implications. Dental damage, problems with hair growth, and scarring, facial deformities, *stunted growth, and *obesity all have a direct effect on the child's appearance. An understanding that disease-free survival is not identical to cure, led to a new view about "being cured". In his influential book, *The truly cured child*, Jan Van Eys, a *paediatric *oncologist, explained in 1977 that disease-free survival is not *synonymous with cure, but should extend to the quality of survival. Consequently, the psychological and social consequences of childhood leukaemia also need to be taken (e) account when treating a child with leukaemia.

In that time that warranted an optimistic view on survival, there was so much emphasis on living with leukaemia during active treatment, that the fatal nature of leukaemia became blurred. As long as childhood leukaemia is not a completely curable disease, the life-threatening aspect of the disease remains present. Children and parents must learn how to live with the disease as well as having to prepare for the possibility that the child might die. The fact that a child might die of leukaemia is the most significant issue concerning leukaemia for parents. The turmoil resulting from a diagnosis of leukaemia, still today, is a direct and justifiable reaction to this threat.

Whereas adults immediately associate leukaemia with death, this is less obvious to a child. Therefore, it is important to have insight into how children become aware of the seriousness of their leukaemia

出典 : J. van Dongen-Melman 著 A Child Psychologist's Journey (一部改変)

注)

leukaemia 白血病

radiotherapy 放射線療法

chemotherapy 化学療法

imminence 急迫

outpatient 外来患者、外来の

innocuous 無害の

chicken pox 水痘

rigorous 厳しい

eradicate 根絶する
puberty 思春期
neuropsychological 神経心理的な
dysfunction 機能障害
malignancy 悪性腫瘍
deformity 変形
stunt 発育を妨げる
obesity 肥満
paediatric 小児科学の
oncologist 腫瘍学者
synonymous 同義の

[設問 1] (a) ~ (e) に入る適切な単語を述べなさい。

[設問 2] この 50 年の間に小児白血病の治療成績はどのように変わってきたか、またそれは何によってもたらされたと記載されているか、句読点を含めて 150 文字以内で述べなさい。

[設問 3] 第 2 段落では、治療方法の進歩と共に、小児白血病に対する認識はどのように変わってきたと記載されているか。それに伴い心理的にはどのようなことが必要になってきていると著者は考えているか、句読点を含めて 150 字以内で述べなさい。

[設問 4] (A) に入る最も適切な言葉はどれか、1 つ選びなさい。

- a. at home
- b. at school
- c. at hospital
- d. in bed
- e. in playground

[設問 5] 下線部①はどうしてそうなのか、句読点を含めて 100 字以内で述べなさい。

[設問 6] 下線部②を日本語に訳しなさい。

[設問 7] 下線部③は何を指しているか、最も適当なものを 2 つ選びなさい。

- a. 白血病の治療にかかる費用
- b. 治療による長期的な副作用
- c. 長く生存するために余分にかかる医療費
- d. 治療によってもたらされた長期的な生活の質の低下
- e. 白血病のこどもを自宅でみることによって生じる家族の精神的な負担

[設問 8] 小児白血病の治療に関して、著者の考えに最も近いものはどれか、2 つ選びなさい。

- a. 再発しないことと治癒することは別である
- b. 治療により知能が低下することはないとされている
- c. 様々な臓器障害を来すような治療は避けるべきである
- d. いったん治療が終了すれば、元通りの生活にもどれると考えて良い
- e. 疾患の治療だけでなく、治療後の精神的・社会的な影響も考慮に入れる必要がある

[設問 9] 5 段落目で、小児白血病の予後が改善するにつれて忘れられつつある事実があると筆者は指摘している。それは何か、最も適当なものを 1 つ選びなさい。

- a. 自分が白血病であったということ
- b. 白血病は多くの人が死ぬ病気であること
- c. 白血病は一生治ることはない病気であること
- d. 白血病の治療には長い時間を要するという事
- e. 白血病には再発、そして死の可能性がいつもありうる事

問題 2. 次の文章を読み、後の設問に答えなさい。なお、「*」のついた単語については本文の後に語注がついているので参考にしなさい。

In 1901 life expectancy was 45 years for men and 49 years for women. By 2012 this had increased to 79.2 years for men and 82.9 years for women. ①This is expected to rise further by 2032 to 83.3 years (an increase of 4.1 years) for men and to 86.8 years (an increase of 3.9 years) for women. The gap between male and female is predicted to be consistent, ie, 3.7 years in 2012 and 3.5 years in 2032. Both biological and non-biological factors play a role in this difference.

This projection is based on the current trend. The precise extent of the increase will depend on patterns of disease and the population lifestyle. Predictions by the Office for National Statistics over the next 70 years show a possible variation of 20 years by 2085.

Life expectancy at birth is the average number of years that a person can be expected to live from birth, assuming that age-specific mortality levels remain constant.

The graph below (Figure 1) shows historical life expectancy and projections of future expectations of life expectancy for both males and females. When modelling future projections it is important to estimate a range of scenarios, as there are several factors which have a direct effect on these numbers. In the graph, LL refers to low variant, P is *principal projection and HL refers to high variant. This is a range of estimates – LL being the least optimistic and HL the most optimistic scenario. Further technical details on the Office for National Statistics website.



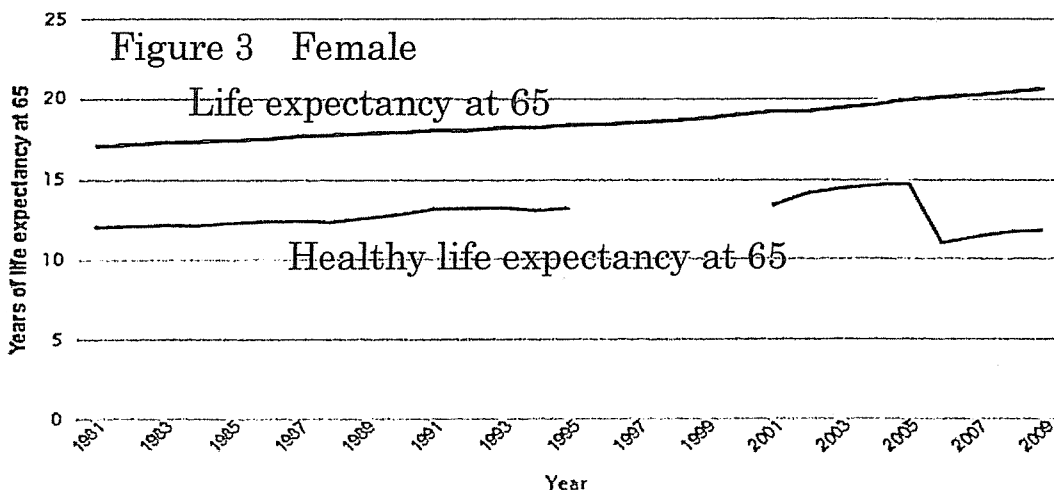
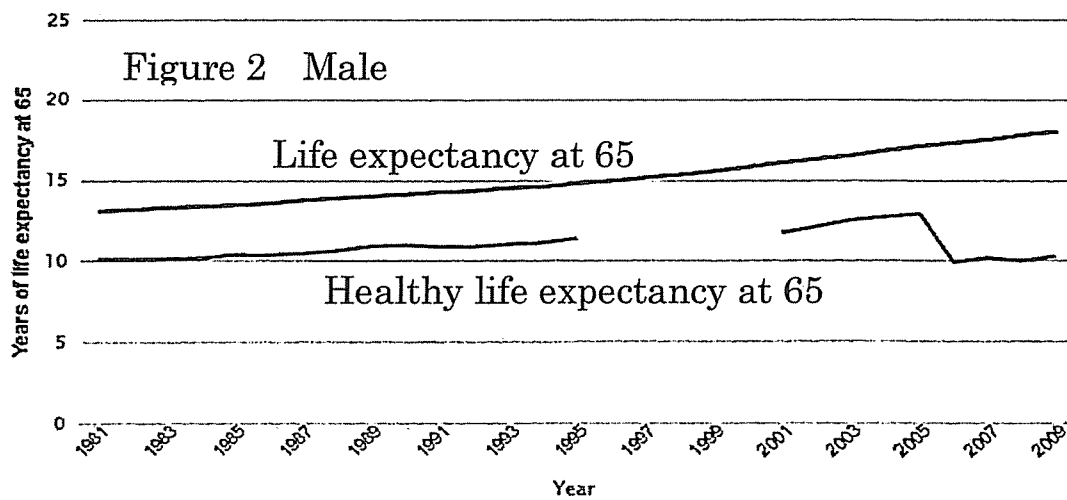
Life expectancy is an estimate of average expected life span, healthy life expectancy is an estimate of the years of life that will be spent in good health. The trend for healthy life expectancy at 65 in England for males and females has increased approximately in line with overall life expectancy at 65

(Figure 2 and 3). For example, between 2006 and 2009, healthy life expectancy increased by 0.8 years for females and 0.5 years for males while overall life expectancy grew by 0.6 years for females and 0.7 years for males. This suggests that that the extra years of life will not necessarily be years of ill health.

There are important *socio-demographic differences in healthy life expectancy. Not only can people from more *deprived populations expect to live shorter lives, but a greater proportion of their life will be in poor health.

②Healthy life expectancy is the average equivalent number of years of full health that a newborn could expect to live, if he or she were to pass through life subject to the age-specific death rates and ill-health rates of a given period. The new measurement of healthy life expectancy was done to harmonize the calculation of healthy life expectancy with that of the European Union. More information on the methodology of the General Health Survey can be found on the Office for National Statistics website.

The dip in healthy life expectancy in the graphs below is a consequence of the new measurement of healthy life expectancy, and trends are still moving towards a greater period of healthy years after 65.



③The length and quality of people's lives differ *substantially. Some of these differences are unavoidable (e.g., genetic differences) or random (e.g., accidents). However, as discussed elsewhere, factors that are *amenable to change, such as socio-economic status, education and quality of one's immediate living environment, also play a significant part, leading to large *inequalities in life expectancy.

The gap in life expectancy between rich and poor persists. After some *fluctuation, the gap is larger now than in the early 1970s. Men and women from the richest social class can on average expect to live more than seven years longer than those in the poorest social class.

出典：Life expectancy, The King's Fund のホームページより

<http://www.kingsfund.org.uk/time-to-think-differently/trends/demography/life-expectancy>

注)

principal projection 主投影

socio-demographic 社会—人口統計学的

deprived 貧困の

substantially 大幅に

amenable 影響を受けやすい

inequalities 格差

fluctuation 変動、ばらつき

[設問1] 下線部①を、句読点を含めて100字以内の日本語で述べなさい。

[設問2] Figure 1 のグラフの説明を、句読点を含めて200字以内の日本語でしなさい。

[設問3] 下線部②を、句読点を含めて100字以内の日本語で述べなさい。

[設問4] Figure 2, 3 に”Dip”が生じた理由を、句読点を含めて100字以内の日本語で説明しなさい。

[設問5] 下線部③を、句読点を含めて200字以内の日本語で述べなさい。