consideration the increased risk of malformation and of complications during the perinatal period for the children of diabetic mothers.

There is also a group of diseases which manifest themselves at a later date which show a definite though slight tendency to familial recurrence. Doubtless, the manifestation is decisively influenced by exogenous factors. To name a few examples, there are the cases of early atherosclerosis and myocardial infarction (apart from those caused by hypercholesterolaemia and hypertriglyceridaemia), rheumatic fever and the entire category of atopic diseases (asthma bronchiale, rhinitis vasomotoria, constitutional eczema of young children and atopic dermatitis). With the exception of some extreme forms, very little is known about the specific genetic causes of the ocular anomalies of refraction.

In actual family counseling, a careful analysis of a particular case of this kind will often not produce anything really concrete in the way of facts and figures. All that can be said is that the children in a particularly affected kinship are subject to a higher degree of risk since the liability for the disease in question is especially pronounced. Should the prospective parent himself be affected, the risk is correspondingly higher. But, and this is an important but, apart from very special cases, there is rarely sufficient reason to oppose propagation altogether. Objections become grave only when two people with the same disease wish to marry, and the disease is a severe one, not amenable to either preventative or therapeutic measures.

Chapter X

Oligophrenia and Mental Illness

This category of illnesses in general involves the same principles that were developed in the preceding chapters in order to arrive at a genetic prognosis.

Some forms of oligophrenia, for instance, follow a simple Mendelian mode of inheritance. Others can be traced to microscopically visible chromosome changes. There is also a category whose genetic roots are best explained in terms of a multifactorial genetic system. Despite this, the entire chapter will be devoted to these diagnoses, and for two very specific reasons:
1. Oligophrenia and mental illness are frequent. Taken together, they include several percent of the entire world population.

2. For both counselor and counseled, problems in this category tend to involve a particularly complex mixture of genetic, psychological, and social considerations.

The limitations of this book will not permit a detailed discussion. For further information, the reader is referred to Volume V, 2 of the Human Genetics Handbook by P. E. Becker or to Motulsky’s (1969) book. In this volume, various authors discuss all the questions in this area for which genetic research has found some sort of an answer.

a) Oligophrenia

Oligophrenia is not clearly distinguishable from what we describe as “normal intelligence”. The borderline is vague and the transition is continuous. It comes as no surprise, therefore, to learn that the definition of the term is hotly disputed. In general, however, scientists agree that the line between “physiological stupidity” and a light case of oligophrenia can be drawn at an IQ of about 70. Taking this figure as the starting point, the estimated frequency of individuals with a lower-than—70 IQ is, in various populations, somewhere between 1 and 3% (for detailed figures see Zerbin-Ruedin, 1967).

There are many different exogenous and genetic causes for oligophrenia; seen as a whole, though, the cases fall into two relatively definite categories (Table 10): one, a (more numerous) high-grade group and two, a (less numerous) low-grade group. The dividing line between the two groups falls at an IQ of about 50. Patients with an IQ of 70—50, the group of high-grade mental defectives, are usually described as “feeble-minded” or “morons”, whereas those with an IQ of less than 50 are classed as “imbecile” or—in the worst cases—as “idiots”.

From the genetic standpoint, the two groups are distinctly different. The composition of group 2 it particularly uneven. It is in this group that the majority of exogenous cases are to be found, i.e. these caused by birth defects, traumatic lesions of the brain and cerebral diseases during infancy. Statistics consequently show that most of these cases are sporadic, i.e. the only cases in otherwise normal—relative to the average population—families. Under no circumstances can it be assumed, however, that all severe cases of