Moderation in medical intervention

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Executive summary

Health Council of the Netherlands

With the ongoing development of medicine, the number of possibilities for diagnosis and treatment of medical conditions is continually expanding. As a result, doctors regularly target physical and mental complaints and symptoms that previously went unrecognised, were untreatable or not considered to be medical issues. This *medicalisation* generally provides health gains: a longer life expectancy and/or a better quality of life for patients. However, negative effects can also occur: treatments or examinations that do not result in health gain but rather unnecessary healthcare costs or even damage to the patient as a result. This advisory report focuses on these 'undesirable' forms of medicalisation.

Forms of undesirable medicalisation

In practice, undesirable medicalisation occurs in various forms:

- People are labelled 'sick' because their condition fits a definition of a *new disease*, or the broadened definition of an existing disease. But this does not improve their health condition.
- People are offered medical treatment, not because they have a condition that they did not have before (to that extent), but only on behalf of an extension of *treatment indications.* Yet, this does not improve their health.
- People are tested for conditions without indications that point to a specific disorder or without having the test provide meaningful information. This is *overtesting*.
- With a diagnostic test, a disease is diagnosed that does not result in bothersome symptoms. This is *overdiagnosis*.
- A condition is treated without resulting in health gain or treatment is given that is more severe than necessary. This is called *overtreatment*.

Request for advice from the Minister of Health, Welfare and Sport

The Minister of Health, Welfare and Sport asked the Health Council to provide insight, based on case studies, into the following:

- mechanisms resulting in undesirable medicalisation;
- scope and cost of the problem;
- opportunities to influence the process of (undesirable) medicalisation.

Case studies

In answering the Minister's questions, five cases were examined in this advisory report:

1. treatment with gastric acid suppressants for a normal physiological phenomenon in babies: regurgitating food at times (*reflux*);
2. treatment of the symptoms associated with *menopause* in women using hormone preparations;
3. expansion of the indication for treating high *cholesterol levels*, resulting in an increase in the number of people eligible for cholesterol-lowering medication;
4. detection of *pulmonary embolisms* with CT scanning technology that is so advanced that very small *pulmonary embolisms* are also found, without knowing whether they cause health problems;
5. deployment of the PSA test for early detection of *prostate cancer*, while this test lacks speci-

Forms of medicalisation investigated in the case studies

Form of medicalisation \ Case	Cholesterol-lowering medicine for all	Gastric acid suppressants for babies with reflux	Hormone therapy in post-menopause	Advanced scan on pulmonary embolism	PSA test for prostate cancer
Defining new diseases / expanding disease definitions		x	●		
Undesirable indication expansion	●				x
Overtesting	x				●
Overdiagnosis	x	x	x	●	x
Overtreatment	x	●	x	x	x

A round symbol indicates the major form of medicalisation that is illustrated by the case; crosses indicate other forms of medicalisation playing a role in the case.

ficity to provide a definitive answer.
In the table above, a circle indicates which (major) form of medicalisation is illustrated by the case in question; a cross indicates which other forms play a role.

Mechanisms resulting in undesirable medicalisation

In this advisory report, the Health Council has identified how undesirable medicalisation can occur. The Council distinguishes the following mechanisms:

- Many people believe that every symptom can be treated and that every disease can be prevented. Such *high expectations from healthcare* can lead to undesirable medicalisation when the doctor uses diagnostics or treatments that have not been proven effective, e.g. only to reassure the patient.
- Medical professionals generally have a *strong focus on taking action and treatment.* They are easily inclined to use diagnostics or treatments. When this happens without leading to health gains, there is overtesting, overdiagnosis and/or overtreatment.
- Medical guidelines are intended to ensure that only diagnostics and/or treatments that have been shown to lead to health benefits are used. However, improper interests sometimes played a role in drafting the guideline,

or a recommendation in a *guideline is insufficiently evidence-based*. This can lead to ineffective medical care.

- Strong drug promotion by pharmaceutical companies can lead to a *distorted image of the efficacy of medicines.* This means that drugs are prescribed that do not lead to health gains or even to damage.
- New capabilities of advanced medical equipment often appear to be spectacular, but do not always yield health benefits. *The absence of proper procedures for introducing new equipment and diagnostic testing* reinforces their unnecessary application.
- Government policy in financing healthcare includes incentives that promote undesirable medicalisation. For example, due to *output-based funding,* hospitals and (many) hospital physicians are paid for what they do, not for what they leave.
- Medicalisation is also promoted through *incorrect or biased information* via internet and the frequent *exchange of personal experiences via internet forums and social media*. Stories make people unnecessarily anxious, causing them to go to the doctor sooner than necessary and/or to insist on diagnostics or treatment that is not indicated.

Scope and cost of the problem

Macro figures on healthcare use sometimes allow to deduce that a particular treatment is suddenly applied more often than before. However, there are no hard data on the extent to which undesirable medicalisation occurs. This makes it difficult to properly identify the costs of the problem.

A further complication in determining costs and benefits is that the boundary between desirable and undesirable medicalisation is not always clear. This is debated on a regular basis. Often, health gains, health damage and the economic advantages and disadvantages of medical interventions are not properly understood in the absence of (independent) research, or due to uncertainties in interpretation of the evidence.

Opportunities to influence the process of medicalisation

The Health Council sees the following opportunities to influence the process of medicalisation:

- *Shared decision-making*. When patients are actively involved in the decision-making process on diagnostics and treatment options, they seem to be less inclined to choose unnecessary medical intervention. Investing in more consultation time could therefore help.
- *Reliable medical information.* Investment in good medical information via internet is also a way to combat undesirable medicalisation.
- *Admission of medical devices and diagnostic equipment.* Better regulation of the admission of medical devices, imaging equipment and diagnostics is also a way to combat unnecessary healthcare.
- *Guidelines.* Medical guidelines should include explicit considerations regarding the risk of undesirable medicalisation. A keen eye for undesirable conflicts of interest is essential in drafting guidelines.

The Health Council also recommends that the Minister of Health, Welfare and Sport:

- promotes experiments with alternative financing structures in which the focus is on health benefits as added value instead of medical production;
- encourages research on promising new practices of funding and managing healthcare;
- promotes independent research on the effectiveness and safety of medical interventions;
- in collaboration with patient organisations, invests in information to citizens and at schools, and in reliable medical information on the internet.

The Health Council of the Netherlands, established in 1902, is an independent scientific advisory body. Its remit is “to advise the government and Parliament on the current level of knowledge with respect to public health issues and health (services) research...” (Section 22, Health Act).
The Health Council receives most requests for advice from the Ministers of Health, Welfare and Sport, Infrastructure and the Environment, Social Affairs and Employment, and Economic Affairs. The Council can publish advisory reports on its own initiative. It usually does this in order to ask attention for developments or trends that are thought to be relevant to government policy.
Most Health Council reports are prepared by multidisciplinary committees of Dutch or, sometimes, foreign experts, appointed in a personal capacity.
The reports are available to the public.

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