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Ethical aspects of the Japanese programme to prevent lifestyle related diseases

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Abstract

Since April 2008, Japanese insurers are obligated to implement a programme to prevent lifestyle related diseases consisting of annual health checks, which screen for Metabolic Syndrome (MetSyn) and health guidance programmes, which aim to induce behaviour modification to prevent lifestyle related diseases. The programme is based on the assumption that visceral fat is a risk factor for MetSyn, which is a risk factor for lifestyle related diseases. Therefore, the programme focuses on the prevention of obesity, but this involves several aspects, which are ethically questionable.

In this essay, I use the ethical framework for the prevention of overweight and obesity introduced by Marieke ten Have et al. (2012) to analyse ethical aspects of the Japanese programme to prevent lifestyle related diseases. The framework takes into consideration how a programme affects physical health, psychosocial well-being, equality, informed choice, social and cultural values, privacy, the attribution of responsibilities and liberty.

Following this framework I show ethical pitfalls of the Japanese programme to prevent lifestyle related diseases, which are mostly due to an oversimplification of obesity and its causes and consequences. It is likely that the programme has negative effects on the physical and psychosocial well-being of the participants as it may reinforce stigma and lead to eating-disorders. Further, it hinders informed choice and results in an unbalanced attribution of responsibilities. While social and cultural values are protected, problems concerning privacy and liberty are likely to occur due to a stronger emphasis on the individual in contemporary Japan.

Keywords: ethics, obesity, lifestyle related diseases, Japan

Introduction

In Japan, a national programme to prevent so-called lifestyle related diseases was introduced in 2008. Lifestyle related diseases, such as diabetes, cardio vascular disease or cancer, are responsible for roughly a third of health care costs in Japan (MHLW 2011: 8) and are expected to cause even more costs in the future due to Japan's rapidly aging population. In fact, lifestyle related diseases were formerly known as 'adult diseases', which indicates that they occur as people age. However, it is now widely accepted that these diseases can be prevented through behaviour changes that improve lifestyle and therefore have been called lifestyle related diseases since 1997.

This shift of meaning was consequently reflected in a ten-year agenda called 'Health Japan 21', which started in 2000. 'Health Japan 21' continued the Japanese health policy of 'health creation', but shifted the focus from secondary prevention as well as life-goal creation for the elderly to primary prevention by the elimination of risk factors in everyday life. It contained nine areas of intervention of which the first five (nutrition and dietary habits, physical activities and exercise, rest and mental health development, tobacco, alcohol) focused on lifestyle aspects as prevention regarding the last four areas (oral health, diabetes, cardiovascular diseases, cancer). In contrast to former policies, 'Health Japan 21' described its goals very precisely, but its midterm evaluation in 2005 showed that lifestyle habits had become worse rather than better (MHLW 2007: 3). It became clear that while the goals of 'Health Japan 21' had been well defined the target of the interventions had not, which made the agenda largely ineffective.

Despite campaigns for better nutrition and more exercise, few Japanese felt the need to change their lifestyle because they did not believe themselves to be at risk for disease. After all, lifestyle related diseases evolve slowly and do not show any symptoms for a long time, but once symptoms appear it is too late for prevention. This was the dilemma public health care professionals faced in Japan. They needed a method to demonstrate risk and induce behaviour changes in individuals who thought they were healthy. For this purpose, the concept of 'Metabolic Syndrome' (MetSyn), which had gathered considerable attention at around the same time, came in handy.

The term 'Metabolic Syndrome' is used to describe a cluster of several

risk factors for disease, especially cardiovascular disease and diabetes. There are currently seven definitions of MetSyn in use that vary in detail but basically describe a combination of overweight, high blood pressure, high triglyceride or LDL-cholesterol levels, low HDL-cholesterol levels and insulin resistance (cf. Kassi et al. 2011).

In Japan, obesity is the necessary criterion for MetSyn since there is no 'overweight' category[19]. It is determined either by waist circumference (WC), which should be lower than 85 cm for men and lower than 90 cm for women, or by body mass index (BMI). If someone is not obese by WC but has a BMI of 25 or more he or she will count as obese. Further criteria are high blood pressure (higher than 130 over 85), high blood sugar levels (higher than 100 mg/dl) and high triglyceride levels (higher than 150 mg/dl). To be classified as *metabo*, as MetSyn is called colloquially in Japan, at least two of these criteria have to apply in addition to obesity. All Japanese aged 40 to 74 years should get checked for MetSyn once a year and undergo a health guidance programme if they are diagnosed as *metabo*. If only one criterion applies in addition to obesity, they will be said to be at risk of becoming *metabo* and thus become a candidate for health guidance programmes as *metabo-to-be* too. On the other hand, without obesity they will not be target of health guidance programmes even if other risk factors apply.[20]

The health guidance programmes differ slightly in content depending on where and by whom they are offered, but they all follow the same point system, which determines how many points each action of a counsellor, e.g. a telephone call or an email etc., is worth. A certain amount of points is necessary to complete the programme. Since the Japanese programme to prevent lifestyle related diseases takes a population approach, all participants of the health check screening for MetSyn including those who were not classified as *metabo* or *metabo-to-be* will get information on MetSyn, its dangers and how to prevent it. In a high-risk approach, those classified as *metabo* or *metabo-to-be* should then take part in counselling, which will be conducted in a group or individually.

[19] The Japanese Association for the Study of Obesity (JASSO) defined the Japanese weight categories in 1999 merging overweight and obesity to only one category: obesity (Matsushita/Kumagai 2003: 103).

[20] This will change with the new fiscal year in 2014. However, I will concentrate on the original programme in this essay.

Both groups will be counselled on their eating and exercising habits in an initial interview with the aim to improve their lifestyle and reduce their weight or WC, which is hoped to have positive effects on other risk factors as well and therefore prevent lifestyle related diseases. In addition to this, the *metabo* group will get regular support and further counselling for at least three months.

There are however several aspects in this programme, which pose ethical problems. In this essay, I want to attempt an analysis of ethical aspects concerning the Japanese programme to prevent lifestyle related diseases. In order to achieve this, I will use the ethical framework for the prevention of overweight and obesity, which Marieke ten Have et al. first introduced in 2012. I will describe the framework and why I use it in this essay in the following chapter. I will then go on to analyse ethical aspects of the programme according to this framework and briefly discuss the results.

Materials and Methods

Based on their inventory of ethical issues in programmes to prevent overweight and obesity (ten Have et al. 2011), Ten Have et al. developed a framework for thinking through ethical aspects that might be involved in such programmes. Although this framework is meant for programmes addressing overweight and obesity, I will use it for my analysis of the Japanese programme to prevent lifestyle related diseases, due to the fact that the cause of lifestyle related diseases is defined as an accumulation of visceral fat in the first article of the Implementing Order of the Act on Assurance Medical Care for Elderly People. In order to prevent lifestyle related diseases, the programme aims to reduce weight in participants and is de facto a programme to prevent overweight and obesity. Thus, Ten Have et al.'s ethical framework becomes applicable.

Ten Have et al. identified eight aspects, which can yield ethical pitfalls in programmes to prevent overweight and obesity: physical health, psychosocial well-being, informed choice, cultural values, equality, privacy, responsibility and liberty. To determine whether there are ethical pitfalls in a certain programme, it is necessary to ask what the programme's effects on each of these areas are. However, Ten Have et al. remark that the "mere presence of ethical pitfalls does not imply that prevention of overweight is ethically wrong" (2013:

300). Therefore, the framework alone cannot simply answer the question whether a certain programme should be implemented or not. Rather it is meant as a tool to identify possible ethical problems. Whether and how these should be addressed remains open for discussion. Ten Have et al. also note that their framework is not completely neutral as it presupposes the value of respect for autonomy and the value of health (2013: 299). They argue that overweight and obesity cause health problems that "must be tackled" (ibid.).

It should be noted, however, that this view is questionable, since the link between overweight or obesity and diseases is not as well established as many health care authorities would like us to believe (cf. Aphramor 2005; Campos et al. 2005; Monaghan 2005; Rich/Evans 2005). Studies show that overweight is in fact associated with the longest lifespan (cf. Flegal et al. 2013), which together with the fact that most weight loss interventions are futile in the long term (Aphramor 2005: 318) raises the question whether it is even ethically to promote weight loss. Keeping this in mind, I want to point out ethical problems that are likely to occur in the Japanese programme to prevent lifestyle related diseases (hereafter referred to as 'programme') using Ten Have et al.'s framework in the following.

Results

How does the programme affect physical health?

The programme aims at the behaviour of participants to make them lose weight. More specifically, participants should think of aspects of their lifestyle, which they could improve, e.g. drinking less sugar-sweetened beverages or exercising more, in order to reduce their weight and/or WC. But while a healthy diet and exercise are likely to have positive effects on the health of anybody, it is not guaranteed that they will lead to weight loss. As mentioned above, most weight loss interventions are ineffective in the long-term even if they lead to weight loss in the short-term (cf. Aphramor 2005). Although Ten Have et al. claim that overweight and obesity should be prevented, they agree that effectiveness is a problem for many programmes. They write, "the (cost-) effectiveness of programmes to prevent overweight is often unknown, unfavourable or hard to prove" (2013: 300).

Further, they point to possible negative effects on health, such as the fact

that the risk of eating disorders may be increased (ibid.). Since in the Japanese definition of MetSyn the cut-off point of only 85 cm WC for men is very strict, Japanese men may be at risk of developing eating disorders[21]. For women, on the other hand, the cut-off points may not be strict enough. In fact, the Japanese cut-off points for WC are the only ones that allow a bigger WC for women than for men and have consequently sparked some controversy. Oka et al. (2008), for example, have suggested the reassessment of these cut-off points for a better diagnosis of MetSyn in women.

Another controversial aspect is the role of overweight or obesity in MetSyn, since MetSyn can occur in slim individuals as well. Therefore, obesity is only one component among others in most definitions of MetSyn rather than a necessary component as it is in the Japanese definition. To address this problem, the programme has been revised so that non-obese individuals will be included as targets from April 2014 onwards if necessary (MHLW 2013: 35). The definition of MetSyn, however, will not change. Still, it is questionable whether this revision will make the programme more effective. The programme will continue to focus on obesity and behaviour change – a strategy, which has yet to be proven to be effective although it is generally accepted.

How does the programme affect psychosocial well-being?

Ten Have et al. note that, when it comes to the issue of psychosocial well-being, programmes may unintentionally create fear and worries about the health risks of overweight and obesity, which affect well-being negatively (2013: 300). In Japan, fear of illness and death is actually actively used to motivate lifestyle modification, e.g. some municipalities use a flowchart containing a patient's health data to demonstrate how near they are to illness and death. In general, the cause and effect of obesity are commonly presented as a kind of 'metabolic domino' falling over or a river ending in a waterfall: Once an individual maintains an unhealthy lifestyle it will become obese, which will lead to MetSyn and consequently to diseases, which will sooner (e.g. by a heart attack or stroke) or later (e.g. by diabetes or cancer) lead to death. Other causes of obesity like genetics or environmental factors are completely left out as well

[21] The Japanese engineering and electronics company Hitachi describes such a case on its website (Hitachi).

as other causes for disease.

This one-dimensional description of obesity and its causes and effects reinforces the already existing stigma of obese people as it portrays them as being lazy and making the wrong food choices. Especially since overweight and obesity are not distinguished in the Japanese definition of overweight, people lose sight of the distinction between limited overweight and severe obesity, so that individuals get categorized as either slim and healthy or fat and sick.

In the original programme discrimination took place because only obese individuals became the targets of counselling while slim individuals were automatically believed to have healthy lifestyles, although they might profit from improving their eating and exercising habits as well. Instead, they will only get information on the dangers of obesity, which means in their case the dangers that others have to face. This practice, too, reinforces the stigma of obese people as being automatically sick.

How does the programme affect equality?

Besides different types of counselling the programme does not suggest any discriminatory treatment based on WC or BMI. However, problems concerning equality could arise due to the fact that the programme came with a so-called 'penalty' to ensure that insurers conduct the programme and put enough effort in it. This meant that insurers who did not succeed in reducing the number of individuals diagnosed *metabo* or *yobigun* would face a raise in their contribution to the health care system for the elderly of up to 10%. On the other hand, insurers who were very successful would be granted a reduction of their contribution of also up to 10%.

This penalty forced health insurers to implement the programme even in municipalities, in which obesity is not an issue. For these, the programme takes resources, which would be needed to address more pressing public health problems, such as poverty or child abuse for example. In this case, the penalty poses a double burden on municipalities because they have to implement and maintain a programme they do not need and therefore is unlikely to be successful so that they will also be charged with the penalty. However, since the programme so far has not been successful overall, the penalty was suspended.

How does the programme affect informed choice?

According to Ten Have et al., "programmes that suggest that personal choices to eating healthily or engage in physical activity are the solution to all problems neglect other health determinants and fail to acknowledge that obesity is a condition that in some cases requires long-term medical treatment" (2013: 301). Since the cause and effect of obesity are described in an oversimplified way in the programme, the complexity of obesity and lifestyle related diseases is reduced to personal choices only, which has to be called inadequate information. The programme neglects to mention that obesity and its associated diseases are often found in population groups of low socioeconomic status (SES) and are also connected to sleep deprivation, stress and other factors that are not chosen by individuals (cf. Aphramor 2005; Rich/Evans 2005).

How does the programme affect social and cultural value?

As Ten Have et al. state, "[…] food and eating habits are more than just a biological need. They are also related to cultural and social values" (2013: 301). The programme does not hamper participation in social and cultural events such as festivities. Rather there is a tendency to cultivate 'Japanese' eating habits and return to a 'traditional' diet, although it is arguable whether this happens solely for health reasons. As Takeda (2008) writes, food discourses are also grounded in cultural nationalism and contribute to the discourse on 'Japaneseness'.

How does the programme affect privacy?

Since the programme's main aim is to reduce health care costs it combines data from the annual health check and treatment costs to determine patients who cause high costs and will be targeted first. It is believed that insurers have a right to access this data for prevention and take action if it serves to reduce health care costs, but critiques of the programme argue against this, saying insurers make use of the fact that they manage the patients' health data, which should only be used for expense claims (Tsutsumi 2008b: 32). Thus, if not authorized by the patients' consent, using health data for other reasons interferes with their privacy (ibid.).

Conflicts regarding privacy are also due to an increased awareness of the

private sphere in Japanese society. Public health nurses, who conduct the programme's health counselling, experience this changing perception of privacy when they contact individuals. While their outreach to individuals used to be generally welcomed, public health nurses now report cases in which individuals refused their approach and did not understand why and how public health nurses knew of their health problems (interviews conducted in October 2013). Therefore, it is necessary to reassess how privacy is valued in contemporary Japanese society to evaluate how the programme affects privacy.

How does the programme affect the attribution of responsibilities?

As mentioned above the programme is based on the assumption that overweight is the result of unhealthy lifestyle choices and neglects other factors, which influence weight and diseases. Individuals should be responsible for their own health and make healthy lifestyle choices, i.e. eat less and move more.

However, as already mentioned, weight is also dependent on factors like genes, SES etc. and lifestyle is also influenced by factors individuals cannot choose, e.g. circumstances at the work place, transportation systems or lack of time and space for exercise. It is a collective responsibility to change these factors and enable healthy lifestyle choices, but the programme focuses on individual responsibility only. As a result, responsibilities are distributed unevenly, which also undermines the programme's effectiveness. For example, counselling individuals on healthy food choices remains futile if companies fail to offer healthy food at their cafeterias.

How does the programme affect liberty?

According to Ten Have et al. "there is a thin line between enabling healthy choices and unwelcome intrusion" (2013: 301), whether the programme's intervention is perceived as enabling or unwelcome will depend on each individual and on how the health counselling is conducted.

Traditionally, the relationship between physicians and patients in Japan is paternalistic. Patients are not expected to ask questions and receive little information on their health condition (Maruyama 1999: 134-135) and many patients learn about the meaning of their test results for the first time during the programme's health counselling. This is important for informed choice and

therefore the programme can be enabling. However, if it is neglected that "not all people consider health to be the only or most important valuable thing in life" (ten Have et al. 2013: 301) the programme can also be paternalistic.

Although paternalism can be acceptable as for example in the case of a seatbelt requirement, lifestyle choices are very complex and include many actions and circumstances that need to be considered (Tsutsumi 2008a: 37). Thus, the programme's influence on an individual's liberty is much bigger compared to a seatbelt requirement and can turn into a paternalism "which makes it hard to breathe" (Tsutsumi 2008a: 37, translation mine) if participants in the health counselling are contacted regularly by telephone, email, letter or even visits as in the case of individuals diagnosed as *metabo*.

Discussion

As this analysis of the Japanese programme to prevent lifestyle related diseases according to Ten Have et al.'s framework shows, the programme includes several ethical pitfalls, which is mostly due to an oversimplified approach to obesity. To overcome these pitfalls the complexity of obesity and lifestyle related diseases should be taken into consideration, which also means to shift the focus from obesity to lifestyle. It should be acknowledged that not every fat person is sick and not every slim person healthy and efforts should be made to fight these stereotypes to prevent the stigmatisation of obese individuals.

To enable a healthy lifestyle it is also necessary to initiate changes in the environment and other circumstances, which individuals cannot change on their own. Here, regional needs should be respected so that public health resources can be spent on problems, which are relevant, instead of a programme, which is forcedly implemented because of a penalty.

Concerning privacy and liberty more research is needed to understand how the programme affects these values in contemporary Japan. While the group has traditionally been valued more than the individual in Japan, this conception has changed over the last decades, which also led to changed perceptions of privacy and liberty. It is likely that there is a generational gap, so that older generations may find the programme's interventions acceptable while younger ones will feel that their privacy and liberty have not been protected

enough.

Conclusion

Although this analysis has focused on the Japanese programme to prevent lifestyle related diseases, it should be noted that this programme is not exceptional. Rather, it is but one example for how programmes that concentrate on obesity to further public health fail to recognise ethical pitfalls. In fact, it is often difficult for those directly involved in the development and implementation of a preventive programme to identify those pitfalls (cf. Ten Have et al. 2013: 304). Therefore, the Japanese programme to prevent lifestyle related diseases should be discussed with various stakeholders to determine ethically problematic aspects, which require revision or special attention by those who will conduct the programme. Of course this should have been done *before* its implementation, but a retrospective evaluation of the programme can still be of value for future programmes.

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