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The Danish Choosing Wisely concept

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ABSTRACT

Introduction Choosing Wisely has been introduced in more than 20 countries. In Denmark, the Vælg Klogt initiative was launched in the spring of 2020. The aim of Vælg Klogt is to reduce unnecessary and potentially harmful tests, treatments and procedures in healthcare. Vælg Klogt also contributes to the implementation of shared decision-making. This study explored knowledge of the Danish Vælg Klogt initiative among patient associations and scientific societies in Denmark.

Methods This was a cross-sectional questionnaire study among patient associations and scientific societies. Descriptive and content analyses were used to interpret the quantitative and qualitative results, respectively.

Results Both the patient associations and the scientific societies had little knowledge of Vælg Klogt; still, they agreed that overuse and waste occurs in Danish healthcare. The reasons are multifactorial, but both parties mentioned a fear of making mistakes and a lack of communication between departments. The initiative is welcomed, provided recommendations are based on evidence, integrated into clinical guidelines, well communicated and prepared in collaboration between patients and physicians.

Conclusions Knowledge of the Danish Vælg Klogt initiative is scarce and implementation of Vælg Klogt must include extensive communication to patients, physicians, leaders and politicians. However, the mutual agreement between patient associations and scientific societies on the reasons for overuse promises well for the initiative.

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The provision of medical services that are more likely to cause harm than good (overuse) has been discussed for several years [1, 2]. In response hereto, the American Board of Internal Medicine Foundation launched the Choosing Wisely campaign in 2012 [3]. The aim of this campaign was to improve the dialogue between clinicians and patients and assist them in choosing evidence-based care that is free from harm and truly necessary while avoiding duplication of tests or procedures [3].

Since 2012, similar initiatives in more than 20 countries, comprising private and public health services alike, have prepared evidence-based lists of "do-not-do" procedures, treatments and tests and published a large number of recommendations aiming to reduce overuse in healthcare [1, 4, 5]. Worldwide, most initiatives are physician-driven despite an obvious need to involve patients in both the efforts made to reduce overuse and in the decision-making [6]. Although shared decision-making is far from being fully implemented, the introduction of a Choosing Wisely concept may serve as a push in the right direction [7]. Thus, in the spring of 2020, the umbrella organisations of patient associations (PA) and scientific societies (ScS) jointly established the Danish Vælg Klogt (Danish language for Choosing Wisely) initiative to pinpoint areas in Danish healthcare where

unnecessary tests, treatments or procedures are performed and of which some may potentially be harmful to patients [8]. Vælg Klogt will issue clear evidence-based "do-not-do" guidelines and recommendations for tests and treatments.

The implementation of Choosing Wisely recommendations varies between countries, and their effect still warrants international investigation. The Vælg Klogt initiative focuses on countries with healthcare systems that are comparable to that of Danish healthcare. Thus, data from comparable countries will inform the future work in Vælg Klogt as collection of information from other countries is an integral part of the Danish initiative. Hence, the bulk of the work to be done, including investigation of the effect of Vælg Klogt, still lies ahead of us.

Unlike the international Choosing Wisely organisations, the Danish Vælg Klogt initiative included patients and doctors on equal terms from the onset of the initiative, thus establishing a new organisational model. The aim of the present study was to explore the level of knowledge about the Choosing Wisely concept among Danish PA and ScS before embarking on the Danish Vælg Klogt initiative. The research question was: "What do Danish PAs and ScSs know about Vælg Klogt in Denmark, and what are their attitudes towards and perceptions of the reasons explaining unnecessary tests, treatments and procedures in Danish healthcare?"

METHODS

This was a cross-sectional questionnaire study conducted among PA and ScS in Denmark. Respondents completing more than half of the questions were included in the data analysis.

The questionnaire

The authors CFR, MH and SA designed the questionnaire inspired by the literature and questionnaires used in other countries regarding Choosing Wisely [9, 10]. Representatives (one PA and one ScS) commented on the content and their understanding of the questions; this resulted in minor changes in wordings. The questionnaire comprised 22 questions and was divided into three sections: Demographic data (n = 2), Recommendations (n = 11) and Knowledge of Vælg Klogt (n = 9). Data from the sections "Demographic data" and "Knowledge of Vælg Klogt" are reported in this study. Questions could be answered on a Yes/No scale, a five-point Likert scale, by choosing pre-defined answers or by filling in free text comments. The questionnaire is provided in Appendix 1 (English) and Appendix 2 (Danish) (https://ugeskriftet.dk/files/a11200889_-_supplementary.pdf).

Participants

The questionnaire was distributed by email to all PA members (n = 21) through the umbrella organisation Danish Patients [11] and to all ScS (n = 125) through the umbrella organisation The Organization of Danish Medical Societies [12]. A reminder was mailed after eight days.

Data were collected using the online tool Survey Monkey and analysed descriptively; free comments were analysed through content analysis.

Ethical considerations

According to the Act on Research Ethics Review of Health Research Projects, Act 593 of 14 July 2011, Section 14, studies of this nature have no obligation to report to the Committees.

The participants are all organisations that gave their written consent to publication of anonymised data by completing the questionnaire. The qualitative results were anonymised by giving participants connotation PA = patient organization and ScS = scientific society; both supplemented by numbers (e.g.: PA 12 or ScS 40).

Data-sharing statement

The data used and analysed during the present study are available from the corresponding author on reasonable request in an anonymised version. However, all data are in Danish.

Trial registration: Registered with the Central Denmark Region: 1-16-02-553-20.

RESULTS

The response rate was 86% (18/21) for the PA and 59% (74/125) for the ScS. Included in the data analysis were 18 respondents from the PA and 56 respondents from the ScS. Respondents represent PA and ScS of sizes from less than 500 members to more than 50,000 members.

Overuse

Both PA and ScS reported that unnecessary tests or treatments take place in Denmark and find that this is a problem for Danish healthcare (**Table 1**).

TABLE 1 Various Danish patient associations' and scientific societies' opinion on the prevalence of unnecessary tests/treatments in Danish healthcare.

	% (n)	
	patient associations (N = 17[a])	scientific societies (N = 56)
Unnecessary tests/treatments/procedures take place in the Danish healthcare system?		
Yes	59 (10)	98 (55)
No	0	0
Do not know	41 (7)	2 (1)
Unnecessary tests/treatments take place in my specialty/among patients in our patient group?		
Yes, to a very great and great extent	0	21 (12)
Yes, to some degree and to a lesser extent	71 (12)	74 (41)
No, not at all	6 (1)	0
Do not know	24 (4)	5 (3)
It is problematic for the healthcare system that unnecessary tests/treatments take place?		
Yes	35 (6)	79 (44)
No	29 (5)	11 (6)
Do not know	35 (6)	11 (6)

a) 1 respondent did not answer this question.

Table 2 shows the predefined possible reasons for unnecessary tests, treatments and procedures in Denmark.

Among "other reasons" for overuse, the PA mention lack of guidelines for certain patient groups.

"NN-patients do not fit into existing guidelines" (PA 21)

TABLE 2 The distribution of possible reasons for unnecessary tests/treatments in Danish healthcare as perceived by patient associations and scientific societies.

	Points[a]	
	patient associations (N = 16[b])	scientific societies (N = 54[b])
Extreme time pressure in the healthcare system	3.18	3.39
Patients/relatives ask for tests/treatments	3.31	3.8
Healthcare personnel's fear of complaints or of the authorities makes them do more than necessary	3.46	4.16
Healthcare personnel do not want to make errors	4.18	4.16
Healthcare personnel do not follow national guidelines	3.18	3.04
Healthcare personnel have an economic incentive to do more tests/treatment	2.64	1.9
It has become a habit among healthcare personnel	3.67	3.73
Lack of dialogue between healthcare personnel and patients	3.45	3
Colleagues' expectations	-	2.84
Departments and sectors do not communicate and information is lost	4.25	3.7
The public healthcare must comply with diagnosing and treatment guaranties issued by the government	3.82	3.6
Other reasons	See text	See text

a) Answered on a 5-point Likert scale 5-1: totally agree – totally disagree.
b) 2 respondents did not answer this question.

The ScS mentioned combinations of the reasons shown in Table 2. The ScS found it difficult to explain to patients why a test/treatment/procedure is unnecessary.

"It is easier to do the test than to argue why it should not be performed" (ScS 53)

Knowledge of Vælg Klogt

Knowledge about the Danish Vælg Klogt initiative was sparse both among PA and ScS. Among the PA, 81% (13/16) reported that they had no or little knowledge. The corresponding figure was 72% (38/51) for the ScS. When asked, 25% of PA and 29% of the ScS answered that they believe that Vælg Klogt may contribute to a change in practice and thus contribute to reducing overuse.

However, for the PA, the belief in a potential effect of Vælg Klogt hinges on the recommendations from Vælg Klogt being included in national guidelines.

"It (the effect of Vælg Klogt) depends on whether it will form part of the national guidelines" (PA 15)

For the ScS, any effect will depend on what tests, treatments or procedures are chosen and how the implementation is organised.

"Something like this has been tried many times before. Changing habits is a slow process" (ScS 2)

Furthermore, for both the ScS and the PA, the success of Vælg Klogt depends on whether the healthcare system is able to reduce the fear of making mistakes or being blamed.

"… because defensive medicine permeates the way we think and act nowadays" (ScS 22)

The PA and ScS agree that the primary purpose of Vælg Klogt is to reduce overuse and secondarily to optimise public healthcare spending. **Table 3** shows other suggestions as to the purpose of the initiative.

TABLE 3 What patient associations and scientific societies regard as the purpose of the Danish Vælg Klogt (Choosing Wisely) initiative. Respondents were allowed to provide a maximum of three answers.

	% (n)	
Vælg Klogt	patient associations (N = 15[a])	scientific societies (N = 52[b])
Is supposed to reduce unnecessary tests/treatments	60 (9)	81 (42)
Should be based on evidence	60 (9)	77 (40)
Is supposed to reduce spending in the healthcare system	13 (2)	8 (4)
Should contribute to the optimisation of spending in the public healthcare system	80 (12)	69 (36)
Is supposed to promote good communication and information between patient and physician	40 (6)	17 (9)
Is a cooperation between patients and physicians	13 (2)	19 (10)
Should be integrated into clinical guidelines	27 (4)	25 (13)
Other	0	0

a) 3 respondents did not answer this question.
b) 4 respondents did not answer this question.

Both the PA and the ScS point out the need for widespread information and dialogue as a prerequisite for change in both physicians' and patients' behaviour regarding overuse.

"The results from Vælg Klogt should be distributed all the way down to the clinical departments where tests, treatments and procedures take place" (PA17)

The dialogue should occur at many levels, including the healthcare authorities, managements and clinicians as well as patients. Furthermore, a readiness from politicians and authorities to change from "blame and shame" to a learning culture is requested.

"Better opportunity to learn from mistakes instead of reporting to the authorities (will be needed)" (PA 14)

The ScS saw their involvement in the selection of the tests, treatments and procedures that will be studied as a prerequisite for the success of Vælg Klogt. It was critical for both ScS and PA that the recommendations from Vælg Klogt are based on evidence and that the relevant societies are involved in the design and implementation of the recommendations.

"Vælg Klogt should be widespread, evidence based and integrated into clinical guidelines and patient information" (ScS 60 & ScS 35)

Furthermore, the messages should be clear, short and easy to understand for both patients and physicians.

"It (Vælg Klogt) should make sense and should be easy to use for both physicians and other healthcare providers" (ScS 63)

DISCUSSION

In the present study, both PA and ScS reported that overuse occurs in Denmark, and both groups find that this is a problem for Danish healthcare. The two parties equally often mention the fear of complaints or of authorities, time restraints, lack of communication and dialogue between departments and sectors, as well as deeply ingrained habits and patients demanding tests as possible reasons for overuse. Even though the PA's and ScS's knowledge of Vælg Klogt was limited, both parties welcomed the initiative and reported that Vælg Klogt may contribute to a reduction in overuse, albeit it probably will not eliminate it. The ScS see their involvement as essential in choosing the tests, treatments and procedures to be scrutinized, and in outlining the

recommendations and the “do-not-do”-lists to ensure that they are based on evidence. This will require a solid implementation strategy including ample communication and information along with political and managerial attention, as described previously [13].

Both PA and ScS mention a reduction in overuse as the main raison d’être for Vælg Klogt. However, overuse took second priority when the first Choosing Wisely campaign was launched in the US. The main purpose was the enhancement of communication between physicians and patients (shared decision-making) [3, 4]. Only 40% and 17% of the PA and ScS, respectively, mentioned enhancement of communication as an aim of the Danish Vælg Klogt initiative, even if the current political focus rests firmly on implementation of shared decision making in Danish healthcare. It is beyond the scope of the present investigation to determine whether this lack of dialogue between patients and physicians is rooted in time constraints or is a result of the way we organize healthcare in Denmark, or whether it has become a (bad) habit to prescribe routine tests or deviate from guidelines. However, communicating overuse is no simple task and probably needs to be addressed by drawing attention to cognitive dissonance and problems in perception besides actual perception gaps [14, 15]. We realise that a multitude of reasons may explain overuse in healthcare besides what is occurring between the doctors and patients in the consultation room. For this reason, further studies are warranted involving both patients and doctors to uncover the many possible underlying assumptions, reasons and different perceptions causing overuse.

Both PA and ScS answered that overuse is common in Denmark and both mentioned the fear of making mistakes or receiving complaints as two possible underlying reasons. This inherent fear might induce physicians to practice defensive medicine, e.g. by deviating from standard practice to reduce or prevent complaints or criticism [7, 16, 17]. Overuse of tests, treatments or procedures implies potential harm to patients by producing further unnecessary tests or treatments due to false positive results or direct adverse effects as seen, e.g. in incidentalomas shown to be present in 22% to 38% of common magnetic resonance imaging or computed tomography studies [2]. Therefore, Vælg Klogt also implies a desire to highlight the “first, do no harm” dictum in relation to patient treatment.

The study indicated that knowledge of Vælg Klogt in Denmark is limited and both PA and ScS suggested various ways to integrate Vælg Klogt into clinical guidelines; moreover, both declared a pronounced need for introducing initiatives like Vælg Klogt to optimize the use of resources in Danish healthcare. Here, Vælg Klogt could prove to be one of several contributing factors. Likewise, both parties point to the need for a strong implementation strategy including broad communication of the initiative as well as training of both physicians and patients. Training should comprise specific knowledge transmission, reflective practice and the creation of a supportive environment to ensure that physicians, students and patients benefit from the initiative [18-20].

Limitations

The response rate was high for the PA (86%) and acceptable for the ScS (59%). Danish Patients has 21 member organisations and represents 102 PA. Twenty-one member organisations participated in this study. Thus, the results might not be representative of all PA or of a general patient’s view. However, the PA who participated represented more than 300,000 patients and relatives and, as such, they may be considered representative. Since the questionnaires were completed by the board of directors from both the PA and the ScS, the results in this study reflect the strategic and political standpoint of both the PA and the ScS. The results might be different if the individual members of the PA and ScS had been asked. Furthermore, the development of the questionnaire did not include test for reliability or content validity and therefore might provide unreliable results. With this disclaimer in mind, the study showed the presence of overuse in Danish healthcare and revealed a need for further qualitative studies to explore the reasons for overuse and generate solutions allowing us to manage this problem.

CONCLUSIONS

Knowledge of the Danish Vælg Klogt initiative was limited. However, both PA and ScS coincided that overuse occurs in Denmark and that this is a problem for Danish healthcare. As possible causes of overuse in Denmark, the parties mentioned fear of complaints or authorities, time restraints, lack of communication and dialogue, and also deeply ingrained habits and patients demanding tests equally often. Furthermore, the Vælg Klogt initiative needs to be evidence based, integrated into clinical guidelines and have a strong implementation strategy including broad communication and education for the project to become a success. Consecutive studies that remedy the limitations of the present study are needed to establish if the implementation of Vælg Klogt in Denmark may contribute to reducing overuse.

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REFERENCES

1. Brownlee S, Chalkidou K, Doust J et al. Evidence for overuse of medical services around the world. Lancet 2017;390:156-8.
2. Morgan DJ, Dhruva SS, Coon ER et al. 2019 Update on medical overuse: a review. JAMA Intern Med 2019;179:1568-74.
3. Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the choosing wisely campaign. Acad Med 2014;89:990-5.
4. Levinson W, Kallewaard M, Bhatia S et al. 'Choosing Wisely': a growing international campaign. BMJ Qual Saf 2015;24:167-74.
5. Born KB, Levinson W. Choosing Wisely campaigns globally: a shared approach to tackling the problem of overuse in healthcare. J Gen Fam Med 2019;20:9-12.
6. Elwyn G, Frosch D, Thomson R et al. Shared decision making: a model for clinical practice. J Gen Intern Med 2012;27:1361-7.
7. Saini V, Garcia-Armesto S, Klemperer D et al. Drivers of poor medical care. Lancet 2017;390:178-90.
8. Vælg Klogt initiativet. https://vaelgklogt.dk/ (16 Jul 2020).
9. Colla CH, Kinsella EA, Morden NE et al. Physician perceptions of Choosing Wisely and drivers of overuse. Am J Manag Care 2016;22:337-43.
10. Zikmund-Fisher BJ, Kullgren JT, Fagerlin A et al. Perceived barriers to implementing individual Choosing Wisely® recommendations in two national surveys of primary care providers. J Gen Intern Med 2017;32:210-7.
11. Danish Patients. https://www.danskepatienter.dk/about-danish-patients (16 Jul 2020).
12. Organization of Danish Medical Societies. https://selskaberne.dk/organization-of-danish-medical-societies (17 Jul 2020).
13. Grimshaw JM, Patey AM, Kirkham KR et al. De-implementing wisely: developing the evidence base to reduce low-value care. BMJ Qual Saf 2020;29:409-17.
14. Petersen, GB, Damhus CS, Jønsson ABR et al. The perception gap: how the benefits and harms of cervical cancer screening are understood in information material focusing on informed choice. Health Risk Soc 2020;22:177-96.
15. Armstrong N. Overdiagnosis and overtreatment: a sociological perspective on tackling a contemporary healthcare issue. Sociol Health Ill 2021;43:58-64.
16. Ortashi O, Virdee J, Hassan R et al. The practice of defensive medicine among hospital doctors in the United Kingdom. BMC

Med Ethics 2013;14:42.

17. Opdal PØ, Meland E, Hjörleifsson S. Dilemmas of medical overuse in general practice - a focus group study. Scand J Prim Health 2019;37:135-40.
18. Stammen LA, Stalmeijer RE, Paternotte E et al. Training physicians to provide high-value, cost-conscious care. A systematic review. JAMA 2015;314:2384-400.
19. Kost A, Genao I, Lee JW et al. Clinical decisions made in primary care clinics before and after Choosing Wisely™. J Am Board Fam Med 2015;28:471-4.
20. Silverstein W, Lass E, Born K et al. A survey of primary care patients' readiness to engage in the de-adoption practices recommended by Choosing Wisely Canada. BMC Res Notes 2016;9:301.