Nordlund, J Alcohol Drug Depend 2016, 4:5 DOI: 10.4172/2329-6488.1000250

Review Article OMICS International

Alcohol Policy, Norms and Drinking Habits in Different European Countries

Sturla Nordlund

Department of Substance Use. Norwegian Institute of Public Health. Norway

*Corresponding author: Sturla Nordlund, Department of Substance Use, Norwegian Institute of Public Health, Norway, Tel: +4798656557; E-mail: sturlanor@gmail.com

Received date: October 05, 2016; Accepted date: October 20, 2016; Published date: October 26, 2016

Copyright: © 2016 Nordlund S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction

Most of us believe that alcohol policy, norms and behaviour in relation to use of alcohol are different in different parts of Europe. We often talk about "Nordic" as opposed to "continental" drinking habits. It may seem to be a paradox that in the Nordic countries, where we have the strictest alcohol policies, we see the most drunk people in public places, whilst in the southern parts of Europe, where alcohol policies are the most liberal, people seem to behave in a much more civilized way, even if they have drunk quite a lot [1]. This article is an attempt to understand this paradox, or, more precisely, it deals with understanding the dynamics between policy, norms and behaviour in relation to alcohol consumption, and what effect this has in different parts of Europe.

The most difficult point in this project is to find a simple way of describing norms for alcohol use in different countries with different cultures. How can we measure people's norms about alcohol use? What is acceptable use and what do people react negatively to?

The method of measurement: What does «alcohol abuse » mean?

One way of approaching this problem was introduced about 50 years ago by a young sociologist called Lise Paulsen. She was appointed by the Norwegian Institute for Alcohol Research in 1963, to examine what people in Norway meant by the concept alcohol abuse. She had noticed that everyone agreed that what they called alcohol abuse, should be reduced. When it came to discussions about practical alcohol policy, however, there was much disagreement. Suddenly people disagreed about what should be changed, and in particular, which measures should be implemented to bring about change. She believed that the concept alcohol abuse was the origin of what one calls false agreement, in other words, that the concept was often used to cover up differences that actually exist in attitudes and norms about use of alcohol. In order to obtain a real picture of what people mean by the concept alcohol abuse, she found out that she would describe some specific types of alcohol habits and ask people whether they thought that these were an expression of alcohol abuse or not. In this way, she wished to obtain a clearer picture of people's attitudes and norms about alcohol use and how these were distributed within the population.

But how can we describe alcohol habits in such a way that we can illuminate the different aspects of what people mean by the expression alcohol abuse? Paulsen thought that she first had to decide which aspects of alcohol use could typically develop into abuse. First, she believed that many people would characterize it as abuse if people drank very often. Thus, frequency was one aspect of alcohol use that most people, when it reached a certain level, would call abuse. The second aspect of alcohol use that could be decisive for whether one would call it abuse or not, was the level of intoxication. Many people

would call severe intoxication abuse, even if it did not happen very often.

The third aspect was the social situation in which drinking took place. Social situations can be of many types, and apply to both when and how one drinks, and who one drinks with. Norms can be very different in these situations [2]. In order to avoid having too many descriptions to assess, she found that who one drinks with, or whether one drinks alone, was an important aspect of the drinking situation that could be relevant when assessing whether a situation should be classified as alcohol abuse or not. She assumed that many people would be able to accept more drinking with members of the family or with friends than drinking alone, before one would call it abuse. Therefore she decided to use this aspect as a description of the drinking situation.

She needed to grade these three aspects, frequency, degree of intoxication, and sociability, so that one has a varied menu of descriptions to assess. She believed that three grades for each aspect were sufficient. The levels were described as follows:

1. Frequency

A few times a year
A couple of times a month
A couple of times a week

2. Intoxication

Mildly intoxicated Fairly intoxicated Strongly intoxicated

Sociability

With the family With friends

Alone

By combining all three levels with all three aspects, she obtained in total $3 \times 3 \times 3$, equal to 27 different descriptions of alcohol habits. These could be regarded as a scale from the most careful alcohol use, described as "drinks a few times a year, with the family, and becomes mildly intoxicated," to the most extensive use, described using this scale as: "drinks a couple of times a week, alone and becomes strongly intoxicated".

In the autumn of 1964, these descriptions were presented to a representative sample of 500 people over 20 years of age in five towns in eastern Norway and five towns in western Norway. The descriptions were printed on cards, which were presented one at a time to the people in the sample, who then said whether they meant that the

J Alcohol Drug Depend, an open access journal ISSN: 2329-6488

different descriptions could be characterized as abuse or not. If someone expressed doubt, the card was put at the back of the pile and presented again at the end of the interview. If the person was still in doubt, this was registered. Paulsen published an article based on the answers, where she could describe normative dividing lines in different groups of the population. We will come back to some of her results later. The interesting thing here is the method she developed and used in her study.

25 years later, in 1989, Oddvar Arner, another researcher at the same research institute, decided to carry out a new study using the same method, in order to look at developments in norms for alcohol use. However, in Paulsen's material, he found that the differences in the assessments were small for those relating to descriptions of drinking "with the family", or "with friends". The differences were mainly between drinking alone or in social situations. Therefore, Arner decided not to include descriptions that included the social alternative "with the family". Thus, there were then only two levels of sociability: "alone" and "with friends", and the number of descriptions to be characterized was reduced to $3 \times 3 \times 2$, equal to 18. On the other hand, Arner used a sample of over 1200 respondents aged 15 years and older, representative of the whole country. So in order to compare his results with those of Paulsen, he had to construct a sub-sample of respondents

from the areas that Paulsen's respondents were from, and in the same age group – 20 years and older. This sub-sample had just over 500 respondents.

Seventeen years later, in 2006, a new study was carried out using the same method [3]. Respondents in a sample of 950 persons aged 15 years and older, representative of the whole country, were presented with the same descriptions as those that had been used in Arner's study. The respondents were asked whether they meant that these descriptions represented alcohol abuse or not. Nordlund also constructed a sub-sample, which corresponded to the one Arner had constructed in order to compare his results with those of Paulsen. This sub-sample included 463 respondents.

Changes in norms in Norway

Table 1 shows the proportion of respondents in the comparable subsamples who answered that they would characterize each of the 18 descriptions as alcohol abuse. The 18 descriptions are ranged in descending order according to the proportion of respondents in the 1964 study who answered that the descriptions represented alcohol abuse.

		1964	1989	2006
		N=500	N=506	N=463
1)	Drinks a couple of times a week, alone, and becomes strongly intoxicated	97	93	80
2)	Drinks a couple of times a week, with friends, and becomes strongly intoxicated	96	88	78
3)	Drinks a couple of times a week, alone, and becomes fairly intoxicated	95	86	81
4)	Drinks a couple of times a week, with friends, and becomes fairly intoxicated	92	80	61
5)	Drinks a couple of times a month, alone, and becomes strongly intoxicated	92	74	66
6)	Drinks a couple of times a month, alone, and becomes fairly intoxicated	90	66	51
7)	Drinks a couple of times a month, with friends, and becomes strongly intoxicated	89	62	47
8)	Drinks a few times a year, alone, and becomes strongly intoxicated	85	51	40
9)	Drinks a couple of times a week, alone, and becomes mildly intoxicated	82	69	52
10)	Drinks a couple of times a month, with friends, and becomes fairly intoxicated	80	45	33
11)	Drinks a few times a year, alone, and becomes fairly intoxicated	79	40	34
12)	Drinks a few times a year, with friends, and becomes strongly intoxicated	77	37	29
13)	Drinks a couple of times a week, with friends, and becomes mildly intoxicated	75	53	39
14)	Drinks a couple of times a month, alone, and becomes mildly intoxicated	66	35	27
15)	Drinks a few times a year, with friends, and becomes fairly intoxicated	60	28	18
16)	Drinks a few times a year, alone, and becomes mildly intoxicated	56	23	15
17)	Drinks a couple of times a month, with friends, and becomes mildly intoxicated	46	15	13
18)	Drinks a few times a year, with friends, and becomes mildly intoxicated	27	10	10

Table 1: Proportion of respondents in the comparable sub-samples in 1964, 1989 and 2006 who meant that the different descriptions of alcohol habits indicate alcohol abuse.

J Alcohol Drug Depend, an open access journal ISSN: 2329-6488

It can be rather difficult to see the pattern in all these figures, but we can mention some examples. To take the extremes: Drinking a couple of times a year with friends and becoming slightly intoxicated was regarded as alcohol abuse by over a quarter of the population over 20 years of age in eastern and western Norway in 1964, but by only 10% in 1989, and the same in 2006. In 1964, 97% of respondents meant that drinking a couple of times a week alone and becoming strongly intoxicated represented alcohol abuse, while only 80% thought this in 2006. Also, drinking a couple of times a month with friends and becoming strongly intoxicated (description no. 7) was regarded as alcohol abuse by 89% of respondents in 1964, while under half of the respondents meant the same in 2006. We could go through all the descriptions in this way, and see that there has been a considerable change in norms for what is accepted as alcohol use and what is regarded as alcohol abuse during this period.

A simpler way of presenting this change is to calculate the mean numbers of descriptions that were regarded as alcohol abuse for each of the studies (Table 2). We then obtain a clear presentation of how the trend has developed in a clearly liberal direction. The differences from 1964 to 1989, and from 1989 to 2006, are both statistically significant.

Year	Mean number of descriptions regarded as alcohol abuse	N			
1964	13.8	500			
1989	9.3				
2006	2006 7.7				
Pairwise t-tests, p<0.05					

Table 2: Mean number of descriptions regarded as alcohol abuse in the three studies Mean number of descriptions.

Differences between groups

We can also describe differences in what is meant by alcohol abuse between different groups of the population. For example, if we look at the total sample for 2006 (Table 3), we find that women on average regard more of the descriptions as alcohol abuse: They have slightly stricter norms for alcohol use. Similarly, norms become stricter with increasing age, with the exception of the youngest age group: Those under 20 years of age have somewhat stricter norms than those who are older. The same differences are found in the samples from 1964 and 1989.

Age	Women	Men	Total		
15-19	7.4	6.3	6.8		
20-29	6.9	5.3	6		
30-39	7.3	6	6.7		
40-49	7.3	6.6	7		
50-59	8.5	7.5	8		
60+	10.1	9.6	9.9		
Total	8.2	7.1	7.7		
Gender diff: Mann-Whitney z=3.115, p<0.001					

Age gradient, 20+: regression coefficient=0.85, p<0.001

Table 3: Mean number of descriptions regarded as alcohol abuse among women and men in 6 age groups in the sample from 2006 (N=950).

We can also see how norms vary according to the alcohol consumption of the respondent. Figure 1 show that one becomes less strict in one's view of what is alcohol abuse the more one drinks oneself. People who are teetotal have the strictest view of alcohol abuse, while those who on average drank the most in the study in 2006 (over 6 L of pure alcohol per year) only meant that 4 of the descriptions could be regarded as alcohol abuse. The reason why the curve for 1964 does not continue to the highest level of consumption is because only 2 people in the sample from 1964 drank so much.



Figure 1: Mean number of descriptions regarded as alcohol abuse, for 7 levels of own consumption.

International Comparisons

These comparisons between groups of the population in Norway gave us the idea to use the same method for comparing norms for alcohol use in different countries. The reason we believed that this method could be appropriate for comparing countries was that the descriptions of alcohol habits are so simple and standardized that they are relatively independent of cultural interpretations: The descriptions of alcohol habits should be understood in the same way in all the countries. The attitudes to the described drinking habits are what we were interested in.

In 2009 the so-called AMPHORA project began, which was a project predominantly financed by the EU, with many sub-projects involving researchers from most of the European countries. We then had the opportunity to contact participants from some of these countries, that could be interested in being involved in such international comparisons. We wished to get participants from countries with clear differences in alcohol culture and alcohol policy. We ended up with six countries in addition to Norway that were willing to participate (Table 4). Finland, along with Norway, represented the Nordic drinking culture. Spain, Italy and Slovenia represented the Mediterranean countries. Poland and Germany represented central Europe. Table 4 also shows when the data were collected, who were responsible for the interviews, and the number of people interviewed in each country. Unfortunately, it turned out that Italy could only be represented by the region of Tuscany in this study.

The descriptions of alcohol habits that were used in the Norwegian studies were translated to the languages of the different countries. Even though the descriptions are simple and standardized, translation can lead to problems. Translation of descriptions of frequency and context was unproblematic, but when translating grade of intoxication, words and expressions with slightly different nuances in the different languages could easily be introduced. This is a general problem with most international questionnaires. We tried to reduce this problem as much as possible, partly by having two independent translations, and partly by having two independent back-translations. Our partners in the different countries meant that we had got exact translations without appreciable differences in cultural interpretations.

Country	Sampling period	No. of resp.	Field work by	
Finland	March-10	1021	TNS Gallup	
Germany	March-10	1005	IPSOS	
Tuscany (Italy)	April-11	1000	Sociolab	
Norway	March-06	950	Synovate	
Poland	April-10	1004	TNS OBOP	
Slovenia	Oct-Nov 2010	1059	UTRIP	

Spain October-10 1077 IPSOS

Table 4: Sampling period, number of respondents and the bureaus responsible for the field work in the seven countries.

The way in which the surveys were carried out followed the same procedure that was used in the Norwegian surveys. The descriptions were presented one at a time on printed cards, and the respondents were asked whether they meant that the descriptions indicated alcohol abuse or not. The few cases in which doubt was expressed were also treated in the same way as in the Norwegian survey.

Using the answers from the different countries, we calculated the proportion of respondents in the samples who meant that the different descriptions indicated alcohol abuse. This produced a large number of rather disorderly figures. So in order to obtain a more systematic picture of the results, we have presented these proportions graphically in Figure 2. Here, the descriptions are ordered in a way that give relatively small fluctuations (but of course in the same order for all countries). However, we cannot deny that it gives a rather unclear picture. The only thing that seems clear is that the two Nordic countries stand out from the other countries, by generally having a much lower proportion of respondents who assessed the different descriptions as alcohol abuse.

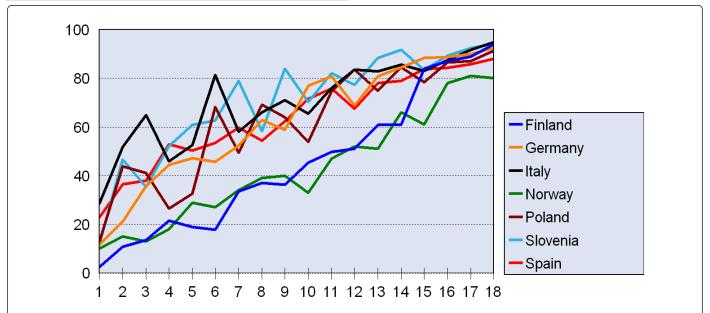


Figure 2: Proportion of respondents from the samples from 7 European countries who meant that each of the 18 descriptions was expressions of alcohol abuse (Per cent)

We can demonstrate this more clearly by looking at the mean proportion of answers from the different countries that conclude with alcohol abuse. We regard this as an expression of the general "normative climate" regarding alcohol use in the different countries. These mean proportions are presented graphically in Figure 3.

We see that there are three levels for the mean number of assessments of alcohol abuse. The Nordic level represents the most liberal view. Tuscany and Slovenia stand out by being on their own level, with the strictest assessment of alcohol abuse. Poland, Germany and Spain are on a level that lies between these two extremes. The

differences between the three levels are statistically significant, but the differences between the countries in each level are not.

We also see, with the exception of Spain, that the countries at each level are neighbouring countries. This indicates that fairly large areas of Europe in general have a relatively uniform understanding of norms for alcohol use. Norms for alcohol use can be said to vary geographically throughout Europe in a way that justifies the often used, but seldom defined, concept alcohol culture.

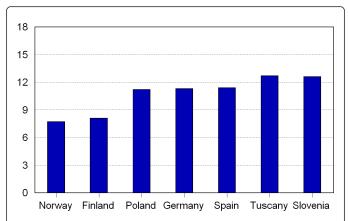


Figure 3: Mean number of descriptions of drinking habits that are regarded as alcohol abuse in seven European countries.

We can also look at how the mean number of descriptions that are characterized as alcohol abuse varies among the population in these countries. Table 5 shows that women are somewhat stricter than men in their view of what is alcohol abuse in all the countries. We also see that the view of alcohol abuse becomes stricter with increasing age (with a few exceptions) in all the countries.

	Norwa y	Finlan d	German y	Polan d	Spai n	Tuscan y	Sloveni a
Gender							
Men	7.2	7.5	11	10.5	10.8	12.1	11.4
Women	8.2	8.9	11.8	12.2	12.2	13.3	13.7
Age							
15-29	6.5	7.5	10.6	10.3	10.2	8.9	10.6
30-49	6.9	7.4	11.4	11.5	11.2	12.2	12.9
50-64	8.5	8.8	11	11.9	12.8	14.3	13.5
65+	10.1	9.7	12.4	12.3	12.3	14.3	14.5
Total	7.8	8.2	11.4	11.4	11.5	12.7	12.6
N	935	1018	986	984	1071	1000	1058
Note: Sampling weights applied.							

Table 5: Mean number of descriptions assessed as alcohol abuse, by age and gender.

Formal regulations: alcohol policy

Rules and regulations regarding alcohol in society are naturally not only informal and unwritten, not only attitudes and norms. In addition we have formal and written rules and regulations, in other words legislation and provisions that constitute alcohol policy in society. The reciprocal relationship between informal norms, formal alcohol policy and people's behaviour can be described simply in the model shown in Figure 4.

What is important here is that people's norms and behaviour forms a continuous feedback process, which is the natural way of regulating

behaviour [4,5]. But this regulation is often regarded as inadequate. Formal rules and regulations regarding behaviour are also needed. These often arise as a result of normative pressure on the authorities from organizations, groups and influential individuals. In the long term, such rules and regulations can also be changed when politicians are changed after an election. Much of the power in this system is conveyed through communication, to a large degree through the media. The media are not included in this figure, because the media work on every level in the system.

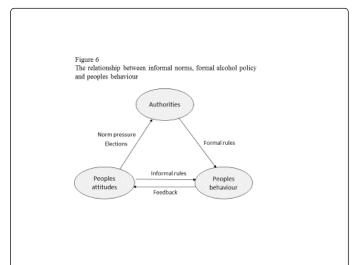


Figure 4: The relationship between informal norms, formal alcohol policy and people's behaviour.

We have shown how the informal rules and regulations vary, so now we want to know what the formal rules and regulations are in the different parts of Europe. In order to do this, we use some of the results from another part of the AMPHORA project: a newly developed scale for assessing how comprehensive and restrictive alcohol policy is in different countries.

This scale (the AMPHORA scale) was developed by Thomas Karlsson, Mikaela Lindeman and Esa Österberg at the National Institute for Health and Welfare (THL) in Finland. They sent out a questionnaire to central persons in all the European countries, with detailed questions about alcohol policy in six main areas (Table 6).

The six areas are weighted slightly differently. For example, control of production, retail sale and distribution counts for 25% of the total index, as does taxes, excise duties and price. Public policy counts for 5%. The maximum number of points is 160 [6]. Several scales have been developed for measuring the extent and restrictiveness of alcohol policy, but when they are compared, they turn out to be fairly similar.

	Max points	%
Control of production, retail sale and distribution	40	25
Age limits and personal control	24	15
Control of drunk driving	24	15
Control of advertising, marketing and sponsoring	24	15
Public policy (Public prevention, campaigns, etc.)	8	5

Taxes, excise duties, and price of alcoholic drinks	40	25
Total	160	100
Source: Karlsson T, Lindeman M, Österberg E [6]	,	

Table 6: Main categories in the AMPHORA scale for measuring the magnitude and restrictiveness of the alcohol policy, and maximum number of points obtainable in each category.

Here we shall look at the results of the assessments according to the AMPHORA scale for the seven countries in this study. We recalculated the results for the seven countries to construct an index, by dividing the points for each country with the maximum possible number of points (160). This index is shown in Figure 5.

As expected, Norway has the highest number of points, in other words, Norway has the strictest alcohol policy, with Finland in second place. Germany and Tuscany/Italy are assessed as having the most liberal alcohol policies.

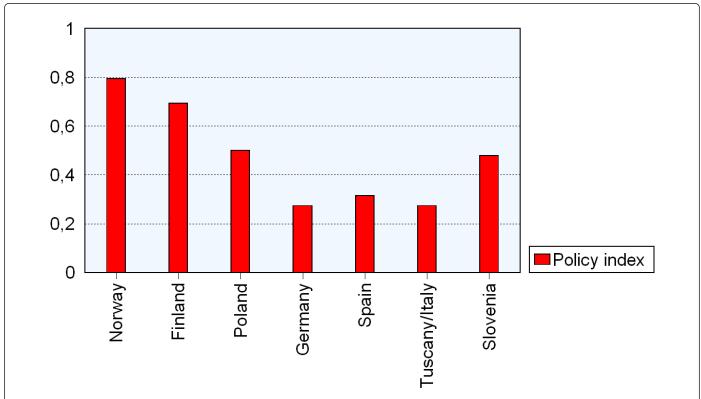


Figure 5: The score for the seven countries using the AMPHORA scale for measuring the magnitude and restrictiveness of the alcohol policy.

However, we are interested in comparing this measure of the comprehensiveness and strictness of the alcohol policy with what we have called the normative climate in these countries. In other words, we want to compare the informal and formal rules and regulations for the use of alcohol. In order to do this, we constructed a normative index in a corresponding way to the policy index that is we divided the mean number of descriptions of drinking habits that were assessed as alcohol abuse with the maximum possible number (18). In this way we obtained a common measure for making such a comparison that are two indices both varying from 0 to 1. Both indices are shown graphically in Figure 6. The graphical presentation of the normative climate is naturally exactly the same as that shown in Figure 3, apart from the fact that the scale here goes from 0 to 1.

Seen in relation to each other, these two indices show something interesting. The normative climate is quite strict in the countries where

the alcohol policy is most liberal, that is in Germany, Spain and Italy, whilst the normative climate is most liberal in the countries where the alcohol policy is the strictest that is in Norway and Finland. Poland and Slovenia are rather different, because, despite having a relatively high normative index, they also have a relatively high policy index, though not as high as the policy index for the two Nordic countries. According to the project's coordinator in Slovenia, this is the result of new and relatively strict rules and regulations that were introduced recently, because there was no written alcohol policy during the communist period. But according to the same source, enforcement of the rules and regulations is relatively weak, so that in reality they are not as strict as they appear to be in the figure.

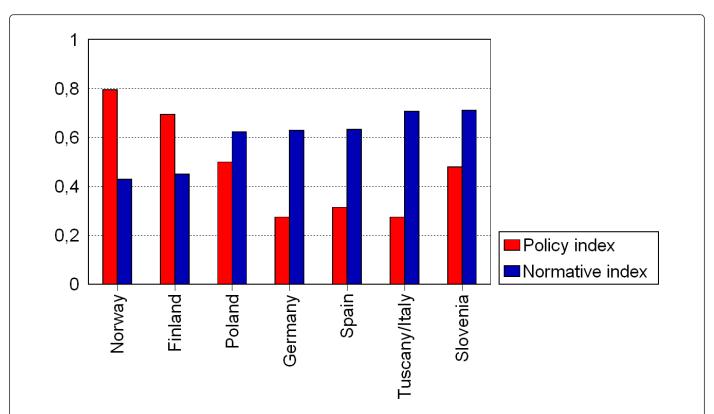


Figure 6: Indices for the magnitude and restrictiveness of the alcohol policy (policy index) and for the normative climate (normative index) in the seven countries.

Conclusions and discussion

In general, there seems to be a certain complementarity between the formal and informal rules and regulations for the use of alcohol, between norms for the use of alcohol and policy measures. Maybe one can say rather casually that one gets the alcohol policy one deserves. If norms are too liberal, and behaviour thus too liberal, then stronger formal rules and regulations must be introduced in order to maintain civilized and reasonably safe social conventions. But if people generally have strict norms for drinking behaviour, and people therefore behave in a civilized way even if they have drunk alcohol, there is less need for so many strict formal rules and regulations. This can be seen as an answer to the paradox I mentioned in the introduction, that is why one sees the most intoxicated people in public places in the Nordic countries, which have so strict alcohol policies, while the southern countries seem to manage perfectly well without so strict alcohol policies.

During the last few years, alcohol policy and alcohol consumption have had a tendency to converge in the European countries [6-9], but there are still large differences in norms for alcohol consumption. As we have seen, norms have developed in a clearly liberal direction in Norway, and the development in Finland has gone in the same direction [10]. However, we know little about developments in the countries further south.

But the most important question is, of course: Which countries have the greatest alcohol problems? Are they the Nordic countries with their strict policies, or the southern countries with their liberal policies? The answer is that the problems are different. In the Nordic countries, where norms allow greater and more frequent intoxication, the proportion of damage associated with intoxication is higher, while in the southern countries there are many more injuries and diseases associated with high consumption [11]. So neither of the two regulation structures is sufficiently effective to prevent the damage caused by alcohol [12-16].

One can also ask oneself when and how these differences in alcohol culture in Europe have arisen. But this is a difficult and complex question [17-21]. All the large political, religious and philosophical movements that have dominated Europe have had an influence, often expressed very clearly through partly brutal use of power and oppression from different quarters throughout history. In other words, this is a question that should perhaps be dealt with by historians.

References

- Anderson P, Baumberg B (2006) Alcohol in Europe: A public health perspective. London: Institute of Alcohol Studies.
- Mäkelä K (1986) Attitudes towards drinking and drunkenness in four Scandinavian countries. 472: 21-32.
- Nordlund S (2008) What is alcohol abuse? Changes in Norwegians' perceptions of drinking practices since the 1960s. Addict Res Theory 16: 85-94.
- Bendor J, Swistak P (2001) The Evolution of Norms. Am J Sociol 106: 1493-1545.
- Lapinski MK, Rimal RN (2005) An Explication of Social Norms. Communication Theory, 15: 127-147.
- Karlsson T, Österberg E (2001) A scale of formal alcohol control policy in 15 European countries. Nordic Studies on Alcohol and Drugs, 18 (English Supplement), 117-131.

- Leifman H (2001) Homogenisation in alcohol consumption in the European Union. Nordic Studies on Alcohol and Drugs, 18 (English Supplement), 15-30.
- Leifman H (2002) Trends in population drinking. In Norström, T. (ed.)
 Alcohol in Postwar Europe. Stockholm: National Institute of Public Health
- Simpura J, Karlsson T, Leppänen K (2002) European trends in drinking patterns and their socioeconomic background. In Norström, T. (ed.) Alcohol in Postwar Europe. Stockholm: National Institute of Public Health.
- Härkönen JT, Mäkelä P (2010) Changes in the norms guiding alcohol use in the Finnish general population over the past 40 years. Addiction Research & Theory, 18: 392-408.
- Ramstedt M (1999) Liver cirrhosis mortality in 15 European countries. Nordic Studies on Alcohol and Drugs. 16 (English Supplement) 55-73.
- Greenfield TK, Room R (1997) Situational norms for drinking and drunkenness: Trends in the US adult population 1979-1990. Addiction 92: 33-47.
- Gmel G, Rehm J, Kuntsche E (2003) Binge drinking in Europe: definitions, epidemiology and consequences. SUCHT 49: 105-116.
- 14. Heath DB (ed.) International Handbook on Alcohol and Culture. Greenwood Press\ Westport Connecticut; London 1995.

- Hibell B, Guttormsson U, Ahlström S, Balakireva O, Bjarnason T, et al. (2009) The 2007 ESPAD Report. Stockholm: The Swedish Council for Information on Alcohol and Other Drugs.
- MacAndrew C, Edgerton RB (1969) Drunken comportment: a Social Explanation. Chicago: Aldine Publishing Company.
- Midanik LT (2003) Definitions of Drunkenness. Substance Use & Misuse. 38: 1285-1303.
- Mäkelä P, Gmel G, Grittner U, Kuendig H, Kuntsche S, et al. (2006)
 Drinking patterns and their gender differences in Europe. Alcohol & Alcoholism 41: Supplement 1: i8 – i18.
- 19. Nordlund S (2012) Popular norms, alcohol policy and drinking behavior. In Anderson P, Braddick F, Reynolds J & Gual A eds. (2012) Alcohol Policy in Europe: Evidence from AMPHORA. The AMPHORA project, available online: http://amphoraproject.net/view.php?id_cont=45.
- Nordlund S, Østhus S (2013) What is alcohol abuse? Attitudes to drinking in seven European countries. Addiction Research & Theory 21: 402-409.
- Pittman DJ, White HR (eds.) Society, Culture and Drinking Patterns Reexamined. Rutgers Centre of Alcohol Studies, New Brunswick, New Jersey, USA, 1991.

J Alcohol Drug Depend, an open access journal ISSN: 2329-6488