Can we compare violence data across countries?

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ABSTRACT

Objectives. The paper aims to explore what knowledge can be obtained about violence through population-based data and additionally, through inter-country comparisons of violence data. Study design and methods. Data on lifetime and 12-month experiences of violence and/or severe threats of violence were obtained from self-administered questionnaires supplementary to nationwide, cross-sectional health interview surveys conducted in Greenland in 1993-94 (N=2,425) and in Denmark in 2000 (N=16,684). The overall response rate achieved for the self-administered questionnaire was 63 % (N=1,393) in Greenland and 63 % (N=10,458) in Denmark. Results. A comparison of violence data shows that overall, the violence prevalence was significantly higher in Greenland than Denmark. Experienced violence and/or severe threats amongst Greenlandic women was almost as prevalent as amongst Greenlandic men – especially so for severe lifetime violence. This was not the case for the Danish sample. Significantly more Danish men than Danish women reported experienced violence and/or severe threats for all age groups. Conclusion. Comparing violence data across countries enables us to describe actual differences in violence prevalence, as well as to highlight potential methodological discrepancies and cultural and gender differences in understanding and, thus, reporting of violence. This knowledge can be implemented in the development and improvement of existing and new prevention strategies.

Keywords: violence, gender, comparability

INTRODUCTION

Violence against women may constitute a major health threat. The public health focus is increasingly turning to the development and implementation of prevention strategies, as well as documentation of the health risks associated with violence. As the World Health Organisation (WHO) has pointed out, to achieve targeted prevention strategies, we need improved data and knowledge about violence; its root causes, prevalence and its consequences (1). Therefore, reliable, valid and representative figures on violence are greatly needed.

Numerous clinical studies have collected data on the health consequences of violence. There is widespread agreement that both physical and sexual violence have serious short-term and long-term health consequences (2, 3). The studies have primarily focused on health effects of violence amongst women, but the limited number of studies that have studied consequences of violence for men have correspondingly found a significant violence-health correlation. This association remains significant and constant regardless of the perpetrator’s relation to the victim (4).

By contrast, there is much less consistency in available data on the prevalence of violence within and across different countries. We can assume that the prevalence of violence should be relatively consistent across the majority of societies, if we work from the well-accepted premise that violence is an overt manifestation of male domi-
nance over women in patriarchal societies, rather than being a culturally determined or variable phenomenon (5, 6) However, while taking into consideration the fact that the range of violence against women is underreported in survey and hospital data, the documented prevalence still ranges from 3%-52% in different country studies in Europe, North America and Asia (7) and from 10%-80% in research conducted in Northern communities in Alaska, Canada and Greenland (8, 9).

The variance in prevalence can in large part be attributed to differing research methods used, discrepancies in definitions and meanings of violence and sampling techniques. WHO has emphasised that accurate figures on the prevalence of violence should be based on population-based surveys, in which representative samples of randomly selected respondents are asked directly about their experiences (10). Additionally, population-based surveys can be used to obtain data on associations between violence and numerous risk factors and consequences.

Thus, some important knowledge can be gained from violence data. But can we obtain a fuller picture of the prevalence of violence and its associated health risks by comparing data across countries? In the present study, we use violence data from two population-based surveys, which also include extensive information on the health and morbidity status of the adult population. The two studies use identical methodologies.

**Aim**
The present paper aims to explore what knowledge we can obtain about violence through population-based surveys in two countries. The paper asks whether we can explain potential differences between country data and what we can achieve by this exercise.

**METHODS AND MATERIALS**

**Greenland**
The Greenlandic data were obtained from the nationwide Health Interview Survey conducted by the National Institute of Public Health, Denmark in collaboration with the Greenland Home Rule (11) in 1993-94. The interview survey was conducted as a face-to-face interview amongst a nationally representative random sample of adults living in Greenland (18 years +). The survey included questions on health, family and social relations, lifestyle and living conditions. The survey also comprised a self-administered questionnaire, which included questions on sensitive topics such as mental health and well-being, alcohol consumption and experiences of violence and sexual abuse.

The study base included a random sample of the adult population (18+) of Greenland from all 17 towns and from 21 of the 52 villages with more than 50 inhabitants. Among these, 2425 were asked to participate in the study. The following analyses however, include only those who identified themselves as Greenlanders and not those who identified themselves as Danes.

A total of 1,580 Greenlanders were interviewed (71% of the sample) and 1,393 Greenlanders returned the self-administered questionnaire (88% of those interviewed) giving a total participation rate of 63%. The questions on violence were answered by 92% of men and 91% of women.

**Denmark**
The Danish data were obtained from the national Health and Morbidity Survey conducted by the National Institute of Public Health in 2000. The interview survey was conducted as a face-to-face interview amongst a nationally representative sample of adult Danes (aged 16 years +). The following analyses only included Danes aged 18 years or above. The survey included questions on health status, morbidity, health behaviour, risk-taking behaviour and health resources amongst other topics. The survey furthermore encompassed a self-administered questionnaire, which contained questions on sensitive topics, such as suicidal thoughts and behaviour, sexual life and experiences of violence and sexual abuse.

Of a random sample of 16,684 adult Danes (identified as residents with a national person identification number), a total of 12,028 (72%) were interviewed and received the self-adminis-
tered questionnaire. A total of 10,458 persons completed and returned the questionnaire (87 % of those that received the questionnaire), yielding a total response rate of 62 %. The questions on violence were answered by 98 % of men and 97% of women.

Identical questions on violence and severe threats of violence were used in the Greenlandic and the Danish surveys. English translation of original question on severe threats:

- Have you ever as an adult been subjected to threats so severe that they frightened you?
  a. Yes, within the past 12 months
  b. Yes, previously
  c. No, never

The question on physical violence asked about 5 different forms of violence, experienced ever and during the past 12 months. English translation of original question on physical violence:

- Have you as an adult, experienced one or more of the following forms of physical violence within the past 12 months or ever?
  a. Being pushed, shaken or lightly struck
  b. Being kicked, struck with a fist or an object
  c. Being thrown against furniture, walls, down stairs or similar
  d. Being strangled, assaulted with knife or firearm
  e. Other form of violence, specify

The present study asked about lifetime experience of violence/severe threats, lifetime experience of severe violence and violence experienced within the past 12 months. In Greenland, experienced violence was defined by a positive answer to one or more of the violence categories and/or severe threats and perpetrator identification. In Denmark, experienced violence was defined by a positive answer to one or more of the violence categories and/or severe threats. For both country studies, severe violence was defined by a grouping of the violence variable to indicate less severe violence (a) severe violence (b-c-d) and other/unspecified violence (e).

**Statistical analysis**

Statistical analysis was conducted using SAS System v. 8.2 and SPSS 11.0 for Windows.

**RESULTS**

The self-administered questionnaire containing the violence questions was answered by an approximately equal number of men and women both in Greenland (men=604, women=669) and Denmark (men=4,975, women=5,483).

**Greenland**

A slightly higher percentage of men reported lifetime experience of violence and/or threats of violence compared to women overall. However, the prevalence of lifetime violence and/or severe threats was significantly higher for women than for men amongst the 18-24 year-olds (Table I). A higher percentage of men reported lifetime severe violence compared with women overall. The prevalence of severe violence was, however, significantly higher for 18-to-24-year-old women than for men in this age group (Table I). A significantly greater share of men reported experiencing vio-

| Table I. Prevalence of lifetime violence and/or severe threats, lifetime severe violence and violence within past 12 months by age and sex. Greenland Health Interview Survey 1993-1994. P-values for age difference. |
| --- | --- | --- | --- | --- | --- | --- |
| Age | Violence/severe threats | Severe violence | Violence past 12 months |
| | Women | Men | Women | Men | Women | Men |
| | n=669 | n=604 | p<0.001 | p=0.035 | n=669 | n=604 | p=0.002 | n.s | p=0.005 | p=0.008 |
| 18-24 | 58.8 | 44.0 | 32.5 | 29.8 | 21.1 | 23.8 |
| 25-34 | 50.2 | 54.3 | 27.1 | 35.2 | 13.9 | 20.6 |
| 35-59 | 44.6 | 46.8 | 28.1 | 29.4 | 10.7 | 11.9 |
| 60+ | 19.4 | 34.8 | 6.5 | 20.3 | 3.2 | 10.1 |
| Total | 46.8 | 47.5 | 26.5 | 30.3 | 13.0 | 16.2 |
lence within the past 12 months compared to women. The highest prevalence was reported amongst 18-to-24-year-olds for both genders (Table I).

Denmark
A significantly greater share of men experienced lifetime violence and/or severe threats of violence than women overall, and the highest prevalence was found amongst 18-to-24-year-olds for both genders (Table II). A significantly greater percentage of men experienced lifetime severe violence compared to women overall. The highest prevalence of severe violence was amongst 18-to-24-year-old males, but for 25-to-34-year-old females (Table 2). Significantly more men reported experiencing violence within the past year compared to women. The highest prevalence was reported amongst 18-to-24-year-olds for both genders (Table II).

DISCUSSION
A comparison of Greenlandic and Danish data produces four main findings. Firstly, that overall, the prevalence of lifetime violence and/or severe threats, lifetime severe violence and violence within the past year is significantly higher in Greenland than in Denmark. Secondly, that Greenlandic women report almost as much violence as Greenlandic men, whereas there is a significant difference between Danish women and Danish men. Thirdly, that young Greenlandic women report significantly more severe violence than Greenlandic men – and the gender difference for the remaining age groups is small. Conversely, significantly more Danish men report severe violence than Danish women, across all age groups. Fourthly, significantly more Greenlandic women report violence within the past year compared with Danish women in all age groups. Amongst men, significantly more Greenlandic men report violence within the past year compared to Danish men, for all age groups except 18-24 years.

How can we explain these national differences in violence prevalence?

Actual differences in prevalence.
The differences found in violence prevalence could be a reflection of actual differences in the prevalence of violence in Denmark and Greenland. Previous Danish studies have shown the violence prevalence to be considerably lower than the present study, ranging from 0.2%-7% amongst 16-to-74-year-old women (12, 13). Previous Greenlandic studies show the prevalence of violence to be around 47% amongst 18-to-74-year-old women (14-16).

However, the present studies are the first in both countries to analyse the prevalence of violence based on nationally representative population data. Therefore, we cannot use previous prevalence studies as an accurate basis for comparison with the present results. Nonetheless, previous findings do support the result that the violence prevalence differs between these national contexts.

Differences in methodology.
Differences in methodology can generally explain part of the difference in prevalence.
amongst previous studies on violence against women in different countries. The study design, including the wording of the questions, whether it is in response to a face-to-face interview, computer-based or paper-based self-administered questionnaire, and the context and place in which the questions are answered can all affect the reporting of violence by participants (17, 18).

Thus, it is now commonly acknowledged that loaded terms such as ‘rape’, ‘abuse’ and ‘violence’ should be avoided in studies, and that specific forms of behaviour should be listed instead (19). The context in which participants are asked about violence may also affect reporting, so that patients at an emergency department may not be willing to disclose the source of their injuries, or if a woman is asked to answer questions about violence in her home, threatened or actual violence by her abuser may affect her ability and willingness to report it.

The present study did, however, ask about specific forms of violence and the questions were asked in a self-administered questionnaire, which meant that in the majority of cases, the context and place in which the respondent answered the questions were flexible, according to her needs. The Greenlandic and Danish studies used identical methodologies, so we can assume that differences in prevalence between the two are not due to methodological differences.

Cultural meanings of violence.
Cultural meanings of violence may differ between countries. The WHO Multi-Country Study on domestic violence and health found that the social function and meaning of violence differed between countries (18). Thus, in some countries, it was considered acceptable, (as opposed to violent) by both men and women for a man to use physical aggression against his wife/female partner if she had been unfaithful to him, whereas in other countries the boundary for when force was acceptable encompassed a greater scale of reasons e.g. if the wife did not take good care of the household, including having dinner ready for her husband when he came home.

There may also be cultural differences in disclosure concerning aspects of personal life, such as sex life, suicidal thoughts or behaviour, alcohol consumption, as well as acceptability of violence (20). To what extent do taboos exist around violence in a given society, is it something that people are willing to talk about as a pervasive feature of social life? Even in a society that has a low tolerance of violence, a lower reported prevalence of violence may not necessarily be reflective of a materially lower prevalence; it could be expected that violence is underreported in a society which stigmatises the use of violence. For example, data in Danish national patient registers reveal that the prevalence of violence based on contacts to emergency departments is not congruent with the prevalence of violence reported by national surveys, which indicates some level of underreporting (21).

There may also be gender differences in the tabooisation of topics and in the internalisation of tabooed experiences, such as exposure to violence. Additionally, violence prevalence may vary across age groups, either due to memory (recall) bias or possibly age-related tabooisation of previous or current experiences of violence. Much of this variation is mediated by gender-specificity in the use of violence, the forms of violence and the power relations and context under which violence is used.

Problems with using quantitative data to study violence in general.
As numerous studies have pointed out, there are some weaknesses inherent in using survey methodology to study violence, particularly violence against women (22-24). These limitations may affect the prevalence of violence reported in different studies. Graham (1983) points out that the survey method treats all individuals as being equal units and therefore does not reflect the patriarchal context in which the data are gathered, a context which differentially affects men and women’s responses (23). Graham also highlights the subjectivity involved in developing survey questions, and previous research has found that the phrasing of
survey questions on violence greatly affects the responses generated, as women do not always label physically aggressive acts as violence or label forced sex as rape - i.e. their definitions of physical and sexual violence may differ substantially from that of the researcher (24, 25).

Additionally, it has been pointed out that the questions not asked can influence the findings as much as the questions asked (25). Westmarland (2001) found that the women in her study rarely named their experiences as ‘violent’ in the administered survey, but subsequent unstructured interviews revealed that the women frequently invalidated and normalised experiences that the researcher would classify as violent. This will affect prevalence, depending on the given population of women asked, if their perception of violence differs from the definition the researcher is applying.

Is violence data comparable across countries?
What do we achieve by attempting to explain national differences?

It could be argued that we may obtain a more accurate picture of violence prevalence in different countries by violence data. This knowledge may enable us to target prevention strategies for specific contexts and needs. However, the question of what we are comparing must be asked, if we know that research methods, meanings and definitions of violence and cultural differences in the acknowledgement of violence do affect the reported prevalence of violence.

As pointed out earlier, methodological differences and cultural discrepancies in understanding of violence mean that often we do not obtain an accurate picture of violence prevalence anyway. In the present study, at least the methodologies used were almost identical. Assuming that the prevalence figures obtained are relatively accurate, what can we then deduce about violence and its associated risk factors by comparing the data across countries?

An actual difference in prevalence is often used as a background for moral comparisons, i.e. to conclude that things are better in one country and worse in another. In the Greenlandic context, Denmark often constitutes a standard against which to compare Greenlandic figures, in order to establish whether a given phenomenon is ‘good’ or ‘bad’. However, the following examples illustrate that this type of comparison may be inappropriate.

Greenlanders report being bothered by pains or illness symptoms more often than Danes. However, Greenlanders use less medicine compared with Danes. Which then constitutes the best situation from a public health perspective? We cannot universally conclude either that Greenlanders should complain less or that Danes should take less medicine.

Similarly, the average alcohol consumption in Greenland has decreased and is now at the same level as that in Denmark. However, we cannot simply view this as satisfactory, as the level of alcohol consumption in Denmark is still high from a public health perspective. So the standard against which we compare things as being ‘good’ or ‘bad’ may be doubtful. In the case of violence, we argue that there can be no such moral comparison - violence is always bad.

Why compare violence data across countries?
We ideally want to obtain a comprehensive picture of the prevalence of violence, its associated risk factors and consequences, not only on a national level, but also on a global scale. Additionally, a standard of some sort needs to be set, in order to avoid explaining abuse, oppression, discrimination as cultural differences, excluding outside interference. We can draw on inter-country data to initiate prevention strategies or learn from examples of good practice in existing prevention and treatment initiatives.

Examples of good practice in data comparison across countries
Comparison of data between countries has been advantageous in some concrete public health examples, specifically for the development of preventative strategies.

1. Obesity
Obesity is an increasing public health concern in Denmark. Public health specialists have been able to draw on examples of good practice in tackling obesity based on existing data (primarily North American) on the prevalence of obesity, its associated risk factors and its social, health-related and economic consequences. Comparisons of data between countries in this case can present valuable insight into developing preventative, but also treatment-oriented initiatives.

2. Smoking
Similarly, smoking, particularly among men, has been steadily decreasing in Denmark in recent years. The Danish public health focus has in recent years turned to young women, who are the fastest growing smoking population in Denmark – and who are accordingly at increasing risk for cardio-vascular and other smoking-related diseases. Data on risk factors associated with smoking amongst women, as well as the consequences of smoking for women’s health are vital for the development of more effective prevention strategies. Smoking amongst young women similarly appears to be a pertinent public health problem in Greenland, as are smoking-related diseases. Here inter-country comparisons could be useful in exchanging examples of good practice related to more effective smoking prevention and "rehabilitation" of smokers.

CONCLUSION
The present study compared data on experienced violence from two nationwide, cross-sectional surveys conducted in Greenland and Denmark. By comparing violence data across countries we are not only able to describe actual national differences in the prevalence of violence, but we can illuminate discrepancies in methodologies used as well as potential cultural differences in definitions and reporting of violence. We can thereby gain knowledge on more effective collection of violence data. This knowledge may then be implemented in the development - or improvement – of existing and new treatment and prevention strategies.

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