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## Towards a transnational sexual health research and policy agenda

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Towards a Transnational Sexual Health Research and Policy Agenda: The  
European Sexual Medicine Network Delphi Study

## **Abstract**

**Introduction** The definition of sexual health evolves over time. As sexual health definitions and priorities are also context-dependent, there is a need to identify a diversity of sexual health challenges and priorities from a pan-European perspective.

**Methods** We examined what a group of diverse experts in this area identifies as interdisciplinary, transnational priorities on sexual health using a Delphi Method. In 2020, 93 participants from 29 countries took part in an online Delphi study. First, based on a three-round Delphi study, a hierarchy of priority topics was developed, comparing consensus rates across the items. Second, a qualitative content analysis of the participants' responses to existing gaps and possible improvements in sexual health was administered.

**Results** An inventory of priority items was created. The panelists identified 37 priority topics, divided into 10 overarching themes. Consensus was reached based on quantitative measurements regarding the importance of the suggested priority topics relevant to sexual health, resulting in 23 implemented items in the list of priorities. Qualitative data from the experts informed us about possible sexual health challenges and blind spots.

**Conclusion** The study shows that the priorities chosen generally refer to 1) Inclusion of sexual health into relevant medical health fields and education 2) Comprehensive sex education in schools 3) Sexual violence. The importance of these three topics was, moreover, reflected in the qualitative data.

**Policy Implications** By delineating a relatively consensual set of priorities for transnational sexual health research and advocacy, this study outlines a possible research agenda for sexual health in the pan-European region, potentially serving as the base and start of joint interdisciplinary practice.

Keywords: Sexual health, Delphi study, Expert consensus, Research agenda, European studies

## **Introduction**

### **Sexual Health**

Many influential models have preceded and contributed to the biopsychosocial (BPS) model of sexology, which is currently the most widely supported paradigm in sexology (See e.g., Bullough, 1998; Gagnon & Simon, 2017; Masters & Johnson, 1966). The BPS model draws on biological/biomedical, social, and psychological research and encompasses sexual pleasure, intimacy, equal relationships, and good communication (van Driel, Gijs, Laan, & van Lankveld, 2018). This model is often used in the broader sense of research and is the basis on which the current working definition of the World Health Organization (WHO) of sexual health arose. The WHO, therefore, describes sexual health in the following working definition:

Sexual health is a state of physical, emotional, mental, and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected, and fulfilled. (WHO, 2006, p.4).

The multi-dimensional BPS model of sexual health and well-being is influenced by cultural, religious, political, economic, psychological, interpersonal, and intrapersonal components of sex (Bakker & Vanwesenbeeck, 2006; Fortenberry, 2013). A shift in the field of sexual health has occurred over the past 35 years, from sexual and reproductive problems to sexual well-being and choices, as outlined in the final issue of *Entre Nous* (Lazdane, 2016), the European magazine for sexual and reproductive health. In an investigation of the historical events partly responsible for the expanding definitions of sexual health since the 1975 WHO definition, Edwards and Coleman (2004) identified eight definitions. These definitions have reflected the

context and time in which they were established and the role they have played in the understanding of sexual health, with the later definitions encompassing mental health, responsibility, and sexual rights. With the availability of oral contraception, followed by the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) epidemic and the emergence of the sexual revolution, public health professionals drastically shifted their approach from a focus on reproduction within the legal framework of marriage to sexual activity and its consequences within non-conjugal and nonreproductive sexual activity. Sexual health, consequently adopted within public health, additionally accounted for overall well-being in addition to its original focus on disease and dysfunction. Giami (2002) concluded that a lack of international consensus with regard to sexual health and its application in public health policy can be attributed to political choices that impact the public health culture and practice within and among countries. Because clinical, biological, and psychosocial disciplines often treat sexual disorders and well-being separately, an improvement in the working partnership of these disciplines is required (Parish & Clayton, 2007; Penwell-Waines et al., 2014).

Improving sexual health requires going beyond biomedical approaches and calls for a deliberate focus on sexual rights and sexual pleasure. Gruskin, Yadav, Castellanos-Usigli, Khizanishvili and Kismödi (2019) states, “A world where positive intersections between sexual health, sexual rights, and sexual pleasure are reinforced in law, in programming and in advocacy, can strengthen health, well-being and the lived experience of people everywhere.” (p. 29). Nevertheless, there continues to be a global tendency to concentrate on negative sexual health outcomes (Ford et al., 2019). By operationalizing sexual health in a sexual health paradigm, Fortenberry (2013) demonstrates that sexual health cannot be improved without considering other related core aspects. The paradigm provides realistic and achievable new approaches that potentially improve general health and well-being while defeating sexual diseases and their

consequences. Fortenberry's model for operationalized sexual health integrates four core elements: sexual rights, sexual knowledge, sexual choice, and sexual pleasure. These key components are embedded in a framework of sexual desire, arousal, function, and behaviors; these core elements are recurrent factors in sexual health definitions. The ideals included in current definitions of sexual health can act as guidelines to clinical and public health practices and research and proposes feasible, multi-dimensional approaches to overall sexual health care.

### **Care and Policy Aimed at Better Sexual Health**

As sexual health is a fundamental physiological and psychological need, its role in public health policies is crucial. Issues related to sexual health, such as abortion, access to contraception, sexual violence, and STI's/HIV may have long-term repercussions for the mental and physical health of those involved (Bakker & Vanwesenbeeck, 2006; Flynn et al., 2016; Nimbi, Rossi, Triopodi, Wylie, & Simonelli, 2019). Swartzendruber and Zenilman (2010) posit that sexual health is, "an integrated care-delivery and prevention concept that recognizes sexual expression as normative and encompasses preventive and treatment services throughout the lifespan" (p. 1005). Currently, no coordinated services to administer all-inclusive care and prevention exist, albeit such evidence-based strategies are necessary. Swartzendruber and Zenilman (2010) speculate that a lack of an integrated approach could lead to ineffective policy, protocols, management, programs, as well as fragmented health services and poor health outcomes. They postulated that a national strategy advocating sexual health may represent a unifying ambition and can act as the core to expand on validated data, asserting that such a strategy would be required to meet population needs (through integrated, coordinated, and extensive services, as well as assisting the progress of local efforts) and emphasizing the necessity of incorporating three key factors (i.e., delivering high-quality sexual health services, providing comprehensive sex education, and guaranteeing funding for access to contraception and other sexual health services). Several other studies also highlight a shift from the deep-rooted and stigmatizing

fixation on morbidity toward a sexual health-oriented strategy and demonstrate the success of programs and interventions that implement sexual health promotion to complement more traditional prevention strategies. Some outcomes include reduced risk behaviors, increased contraceptive use, sexual orientation identity, self-acceptance, and sexual health knowledge (Hogben, Ford, Becasen, & Brown, 2015; Mustanski, Greene, Ryan, & Whitton, 2015; Satcher, Hook, & Coleman, 2015). The operationalization of the triangle approach to sexual health, rights, and pleasure would demand not only thorough analysis, but also a revision of policies and laws to avoid inadvertent discrimination, involvement of stakeholders, as well as an acknowledgment of the rights-based definitions of sexuality, sexual health, and pleasure, as stated in the current working definition of the WHO (Gruskin et al., 2019).

However, here we would like to acknowledge the influence of a contemporary political context in certain European countries that may compromise the autonomy of sexual health policy and promotion, which is another important impetus for highlighting research priorities on a transnational scale. For example, in Turkey, policy changes from the early 2010s demonstrate an evident distancing trend from individual rights-based sexual/reproductive health policy framework which dominated during the 2000s (Yilmaz & Willis, 2020). Similar broader conservative turn has also been observed in Hungary and Poland (Pugh, 2019), and recent reports reveal how their new legislative changes could harm HIV response and adequate sexual education, respectively (Davies, 2020; Holt, 2021). Conversely, in Moldova, the availability of sexual and reproductive health services is a recent requirement for all primary care settings, with a plethora of youth-friendly clinics in all country districts (Stephenson et al., 2021). Hence, the importance of overall political climate of a certain country in implementing research plans, promotional endeavours and policies in sexual health always has to be taken into account.

## **Research Aim**

The aims of this study were to a. outline a relatively consensual set of priorities for transnational sexual health research and advocacy based on identified obstacles, needs, and proposals that exist within the various disciplines in the field of sexual health, and to b. allow a pool of experts to prioritize these topics, which served as a basis for identifying concepts, definitions, recommendations, and the start of joint interdisciplinary work. This is the first Delphi study in the field of sexual health that aims to identify interdisciplinary and transnational research priorities.

## **Method**

### **Delphi Method**

The Delphi method is a research methodology that captures experts' opinions in a scientific area and subsequently obtains consensus among them on a subject matter through an iterative process of questionnaire rounds (Goodman, 1987). Consequently, the approach allows participants to articulate, compare, and reconsider their viewpoints and attitudes to those expressed by others in the sample, without their influential presence at potentially costly and time-consuming face-to-face focus group meetings (Hackett, Masson, & Phillips, 2006). This anonymity could reflect panelists' genuine beliefs. As the cycles progress, panelists' opinions are refined into definite and narrower assertions, and a level of consensus within the whole sample is reached (Hackett et al., 2006). In short, this type of study comprises five fundamental characteristics: iteration, controlled feedback, anonymity, statistical group response and stability in responses, and expert opinion (Goodman, 1987; Linstone & Turoff, 1974; Snyder-Halpern, 2001).

### **Participants**

In order to be implemented in the panel of experts, participants needed to be members of the European Cooperation in Science and Technology (COST) Action "European Sexual Medicine Network" (ESMN). COST is the oldest and widest European funding organization for creating



transnational research networks, called COST Actions. COST Actions' main ambition is to build an international multidisciplinary network of medical science researchers, specialists, practitioners, educators, and social service professionals working in and improving sexual health and medicine. The Action targets the exchange of research results found by various disciplines to discover commonalities in shared concepts, definitions, and approaches. This, in turn, will serve as the beginning of joint interdisciplinary research (Greil-Soyka, Quayle, & Bitzer, 2020). All members are topic experts from diverse backgrounds, all of which are related to sexual health. In total, 93 participants from 29 countries, all members of the COST Action ESMN, were invited to fill out the Delphi surveys online. Approval was obtained from the ethics committee of the Faculty of Psychology and Educational Sciences at Ghent University (Belgium).

### **Procedure**

A total of three rounds took place from April 2020 to July 2020, when consensus was reached. Participants were invited to complete the Delphi surveys online through a web link sent to them through e-mail. The link provided information about the study's purpose, a consent form, their unique identifier, and the survey. Anonymity between participants was guaranteed. Round 1 was an open-ended question survey. Following the completion of Round 1, a web link was sent through e-mail to access and complete Round 2. The second and following round questionnaires consisted of Likert-type scaled responses (e.g., 1 – Strongly disagree to 5 – Strongly agree). To assess consensus of response to the questionnaires in Round 2, a defined average agreement percentage with a 70% cut-off was implemented. This meant that if at least 70% of the participants indicated that they 'Strongly agreed' or 'Agreed' on the 5-point Likert scale, a specific item should be considered a priority; this item was then treated as an item on which participants' opinions converged and was, therefore, included in the list of priorities. If items were not able to reach the 70% cut-off score for consensus but were also not below 50%, the

item was reintroduced in Round 3 to be contested among participants. Items scoring below the 50% cut-off were omitted from the next round. Following the completion of Round 2, a web link was sent through e-mail to access and complete Round 3. To assess consensus of the contested items from Round 2, the same defined average percentage agreement of 70% was used. Cut-offs are fundamentally arbitrary (Diamond et al., 2014), and researchers have not identified clear-cut criteria for reaching consensus (von der Gracht, 2012). Given the multidisciplinary sample's high heterogeneity in the current study (i.e., different professional groupings, disciplines, practices), we chose 70% to indicate that a substantial group of panelists agreed with what was proposed while retaining room for panelists with dissenting views. Moreover, a 70 % cut-off point was included in accordance to Sumsion (1998), as discussed by Hasson, Keeney, and McKenna (2000), in order to preserve the rigor of the Delphi technique. It was also guided by a recent methodological article by Veugelers, Gaakeer, Patka, and Huijsman (2020) on improving the design choices in Delphi studies in medicine, where a 70% cut-off was also emphasized in the context of electronic Delphi studies.

### **Round One Questionnaire**

At the beginning of the first round, participants were asked to give demographic information, including their age, gender, country of residence, area of expertise, main occupation—health care and clinical practice, well-being and clinical services, education, research, public administration, currently not active or 'other'—and their years of expertise. Participants were then reminded of the aforementioned WHO working definition of sexual health (WHO, 2006). The first-round survey consisted of the next three open-ended questions, along with large text boxes for the participants to fill out. The first question (*“Ranking these in order of importance, what do you think are the three most important sexual health issues in your country?”*) was the main focus for this study. However, a second (*“How do you think sexual health issues in your country may be improved?”*) and a third (*“What would you say is the major or most important*

*sexual health expertise gap in your country?*”) question provided more insight into suggested improvements for and experienced gaps in sexual health in Europe. In this first unstructured and open-ended round, participants were invited to express their opinion, generate ideas, and were given freedom to elaborate and justify their rationale (Hasson et al., 2000; Powell, 2003). The first round aimed to identify issues to be addressed in subsequent rounds.

Given the small dataset obtained at Round 1, a manual qualitative content analysis was used in order to identify relevant themes and priorities as units of analysis. De Graaf and van der Vossen (2013) found that automated methods did not lead to efficiency gains in smaller samples. Moreover, they also found that automated coding methods are not necessarily more objective than manual methods, since they demand a priori and a posteriori interpretation and they have reliability and validity problems. Participants’ answers to the open-ended questions differed in length ranging from short expressions (e.g., “sex education in schools”) to longer segments that consisted of several themes (e.g., “formal sex education, avoid the establishment of sexism, prevent gender violence, prevent homophobia, biphobia, transphobia, prevent unwanted pregnancies, change attitudes towards people with intellectual disabilities”). Open-ended responses were checked and coded side by side for commonality and consensus. This was conducted through categorizing paragraphs, phrases, and words into units of analysis that reveal a comparable central meaning or theme (Graneheim & Lundman, 2004). Data were classified into initial codes, and through additional iteration, the codes were then categorized into broad subcategories. Eventually, all subcategories were divided into ten overarching themes (see Table 2). Once the general themes were determined and agreed upon, the development of closed-ended items for the subsequent round began.

### **Round Two Questionnaire**

Based on the content analysis, individual expert opinions from the first round were converted by the monitor team, producing questionnaire items for subsequent rounds, where quantitative

assessments were required. Responses of the first round were analyzed and statistically summarized, which were then presented to the experts of the panel for further consideration. Participants were given 37 items based on the answers concerning priorities from Round 1 (see Table 2). This included a short summary of the subcategory and information on how many participants prioritized this specific item in Round 1. An opportunity to rate each item's importance (i.e., 1 – Strongly disagree to 5 – Strongly agree) and alter prior opinions based on group feedback was provided. Panelists were additionally provided with the alternative to select 'I don't know' for each of these items if they did not feel sufficiently informed, educated, or experienced in particular areas. Following the completion of the second round, the responses were analyzed to determine whether consensus was reached.

### **Round Three Questionnaire**

Following the second round analysis, a third round solely for the contested (i.e., 50%-70% agreement) items was administered. Before each question on a contested subcategory, participants had the opportunity to read a recap of the findings from the second round in the form of a short summary of the thematic subcategory, along with their reference counts. This included both their own and the overall rating for each contested item in the second round. Participants were asked to rerate the item. Following this round, contested items were reanalyzed to determine whether additional items had achieved consensus with the same cut-off score (70%). Items that did not reach 70% or more were considered as not achieving consensus. Finally, panelists were sent a final e-mail thanking them for their participation and requesting overall feedback.

## **Results**

### **Demographics and Response Rate**

In total 93 ESMN COST members were invited through emails to participate in the Delphi study. 64 participants accessed Round 1 but only 50 participants completed it, providing full

survey responses. Of these full responses, 20 were male and 30 were female, with a mean age of 49.80 years (range 32-77 years). Participants listed 27 different European countries as their country of residence, 19 of which are member states of the European Union (EU). Round 2 was completed by 46 participants. We chose to invite the same 93 participants as in Round 1 to fill in the questionnaire of Round 2 since it was not necessary to have participated in the first round to complete the second. Fourteen participants of those who participated in Round 2 had not filled in the first questionnaire. Out of 46 full responses, 21 were male and 23 were female, with a mean age of 51.07 years (range 32-77 years). Two participants did not fill in their gender or age. Only the 46 participants who completed Round 2 were invited to the final round. Round 3 was completed by 33 participants, six of whom had not filled in the first questionnaire. Of these full responses, 14 were male and 17 were female, with a mean age of 50.52 years (range 32-68 years). Two participants did not fill in their gender or age. As expected in a Delphi study, the number of rounds negatively correlated with the response rate. Demographic characteristics of participants for each round are summarized in Table 1.

### **Priorities in Sexual Health: Quantitative Analysis**

In total, of the initial 37 items, 23 items were included (respectively 20 and 3 at round 2 and 3), 11 items were rerated, and 14 items were excluded (respectively 6 and 8 at round 2 and 3) (see Figure 1).

**Round one.** A content analysis of the participants' responses to the Round 1 questionnaire resulted in 37 subcategories grouped into ten overarching categories (examples provided are extracted directly from the online survey). 1) Sexual dysfunction and disease (e.g., *Many diseases and their treatments impair sexual function, which are often disregarded by physicians.*), 2) Sexual and reproductive health and rights (e.g., *Many countries are not living up to the standard of having access to affordable contraception or abortion.*), 3) Age and developmental perspectives (e.g., *Reduce sex-negative ageism and talk about sexual health in*

*middle aged and senior adults.*), 4) Sexual well-being (e.g., *Researchers, practitioners and policy makers have the tendency to focus on problems. However, focus on the positive aspects of sexuality and development of sexual fulfilling lives is necessary.*), 5) Sexually transmitted infections (STIs) and human immunodeficiency virus (HIV) (e.g., *We need prevention strategies in order to battle the growing epidemic of sexually transmitted infections especially among adolescents.*), 6) Vulnerable and minority populations (e.g., *There is discrimination and violence against and stigmatization of minority groups of citizens with non-heterosexual and non-cisgender identities which has major negative implications for physical and mental health.*), 7) Sexual violence and delinquency (e.g., *We need to prevent gender violence.*), 8) Media (e.g., *Digital societies have an impact on sexual beliefs, feelings, and practices.*), 9) Education (e.g., *Sexual education with the focus on positive aspects, without taboo and with practical advice.*), 10) Sexual health-related services and policy (e.g., *Clinical colleagues and commissioners are frustrated by the lack of money provided to meet unrealistic government expectations.*). The items in each category can be seen in Table 2.

**Round two and three.** Following the methodology described, consensus rates were calculated for each round (see Table 2), leading to the final set of consensual items (Table 4).

***Sexual dysfunction and disease.*** Consensus was reached for four items on priorities for sexual health. Two items (*Oncosexology and sexuality in chronic diseases* and *Reduced or low sexual desire*) were perceived to be highly relevant and were rated at 89.10% each. Two other items (*Pain during intercourse* and *Erectile dysfunction*) had an agreement above 75%. One item (*Female orgasms*) narrowly failed to reach consensus at 69.60%, which was, therefore, presented as one of the contested items in Round 3. In Round 3, 75.70% of the panelists agreed that the item representing *Female orgasms* is a crucial topic that should be prioritized in the field of sexology.

***Sexual and reproductive health and rights.*** More than 70% of participants agreed on two items being priorities in the field of sexual health (*Reproductive rights of women* and *Female sexual health*). Both items had an agreement of 71.80%. Two items were considered contested items, as they had not reached the cut-off score of 70% but had not, nevertheless, been below 50% (*Gender equality* (63%) and *Contraception* (60.90%)). Only one of these items (*Gender equality*) was able to reach consensus in Round 3 at 87.90%, while the other item (*Contraception*) did not reach consensus, with a score of 69.70%. The majority of panelists considered one item (*Arranged marriages*) (47.80%) not important in their country.

***Age and developmental perspectives.*** Only one item (*Sexuality in the elderly*) reached consensus at 80.40%. Although not meeting the consensus criteria, more than half of the participants (52.20%) agreed that one item (*Teenage marriages and pregnancies*) should also be considered a priority. In Round 3, this contested item did not reach consensus at 54.50%. Only 45.70% of the participants agreed on the item representing the *Sexual health of those aged 30+*.

***Sexual well-Being.*** One item (*The neglect of psychosocial aspects of sexual health due to the focus on medical issues*) was considered to be very important by the majority of panelists (87.00%). Two items (*Communication between partners in relationships* and *Lack of data about sexual health*) reached consensus and were rated both at 73.90%. Two items (*Neglect of positive aspects of sexuality* and *Impact of lifestyle on sexual health*) had not reached consensus at 67.40% and 63% and became contested items. However, in Round 3, 84.90% of the participants agreed that one of the contested items (*Neglect of positive aspects of sexuality*) must be considered a priority. The other contested item in Round 2 (*Impact of lifestyle on sexual health*) did not make it to the list of priorities with a score of 69.70%.

***STIs & HIV.*** A total of 76.10% of the participants acknowledged one item (*Prevention of sexually transmitted infections*) as a priority of sexual health. One item (*HIV-aids prevention*)

was considered to be contested in Round 2, with an agreement of 65.20%; this was not included in the list of priorities in Round 3, as it reached a consensus of 60.60%.

***Vulnerable and minority populations.*** Consensus was reached for two items (*Sexual minority group of people who identify as lesbian, gay, bisexual, transgender, questioning, and/or queer (LGBTQ+ individuals)* and *Sexuality and physical or mental disabilities*) at 71.70%. One item (*Sexual health within socioeconomic vulnerable groups*) scored just below the cut-off score and did not reach consensus at 69.60%. Another item (*Sexuality and migration*) was considered contested with an agreement of 63%. Both contested items resulted in respective percentages of 63.60% and 63.70%, which were under the cut-off score in Round 3. Two items were not perceived to be priorities of sexual health (*Access to sexual health information and clinical care among religious populations* (39.10%) and *Asexuality* (32.60%)).

***Sexual violence and delinquency.*** Two out of three items (*Sexual violence* and *Child sexual abuse* (76.10%)) in this subcategory reached consensus, of which one item (*Sexual violence*) was able to reach a consensus at a high score of 91.30%. The remaining item (*Sexual paraphilias/delinquency*) only reached an agreement of 47.80% and was not considered to be a priority by the majority of the panelists.

***Media.*** One item (*The Internet and overall mass media*) was able to reach consensus at 71.70%. According to the vast majority of the panelists, the second item (*Pornography*) was not perceived as a priority and only reached an agreement of 47.80%.

***Education.*** All items in this overarching theme reached consensus (>80%). More than 90% of participants agreed on two items (*Inclusion of sexual health into relevant medical health fields and educations* and *Comprehensive sex education in schools*) to be crucial in the field of sexology by reaching consensus at 95.70% and 93.40%, respectively. The third item (*Lack of well-educated professionals in the field of sexual medicine*) reached a consensus of 80.40%.



***Sexual health-related services and policy.*** Participants agreed that one item (*Accessibility of sexual health services*) represents a priority in the field of sexology, reaching 78.30% agreement. The other two items did not reach consensus, with one item (*Funds for sexual health services*) scoring just under the 70% cut-off with an agreement of 69.60%. The other item (*Available sexual health services covered by health insurances*) is considered contested by reaching exactly 50% consensus. Both contested items were not included in the list of priorities for the field of sexology with 69.70% and 63.60%, respectively in Round 3.

### **Gaps and Improvements Related to Sexual Health: Qualitative Analysis**

In addition to this study's main objective, participants in Round 1 (n=50) were asked two other questions aiming to better understand interdisciplinary, transnational improvements and gaps in the area of sexual health (see Method). A qualitative content analysis of the participants' responses resulted in eight subcategories. Seven out of those eight subcategories were also found following the main question's content analysis asking priorities. One additional subcategory (*Public awareness building*) was determined.

**Sexual education.** In total, 17 participants addressed this subcategory when responding to the question about possible improvements, and 16 participants considered this theme to be a gap in sexual health. These participants agreed that support should be provided to children learning about sex and relationships in a healthy and positive way, starting from a young age. One participant mentioned, "*Sexual health should be improved through education and implementation on compulsory courses on sexual medicine starting from primary school with the basics.*" Another member of our pool of experts supplemented this by saying, "*The political awareness of the importance of continuous educational efforts has waned in the last decades. It has become commonplace to think that sex education is solidly engrained in society and that therefore government efforts to stimulate and maintain a sufficient level of sex education are no longer needed.*"

**Inclusion of sexual health into relevant medical health fields and educations.** A total of 20 participants agreed that improvements should be made within this domain of sexual health, and 9 participants viewed this theme as a gap in sexual health practice. Participants bringing up this topic emphasized the need to expand the curriculum of medical students as well as students of public health, psychology, pedagogy, law, and sociology. Therefore, one participant said, *“Sexual and relational skills training and knowledge enhancement should become common at all levels of education. Sexual education should become a standard ingredient of educational programs.”* According to these participants, sexual education becoming a standard ingredient of educational programs should result in a cross-disciplinary clinic that can offer integrated sexual health services, where physicians work together with biomedicists, psychologists, sexologists, sociologists, etc., exchanging experiences and knowledge. As further remarked by one expert, *“We need inter-professional networks. All staff of medical professionals should be able to speak with patients about the effects of sexuality, whether or not combined with a specific disease.”*

**Public awareness building.** In response to possible improvements, 20 participants mentioned this subcategory, and 7 participants thought of this theme as a gap in sexual health practice. It was agreed upon that education, skills, counseling support, and a change of mindset regarding sexual health are required. One participant mentioned, *“The whole field of sexual medicine is rather neglected. There is little understanding of the impact of sexuality on lives. Society holds outdated traditional perceptions, lacks an adequate reimbursement of counseling, and has a health system that is focused on more serious and life-threatening illnesses.”* Participants mentioning this topic agreed on the necessity of identifying problems, making problems visible, decreasing stigmas, establishing misconceptions, and offering treatments through public information campaigns. One respondent proposed, *“We should build awareness by communicating new ways to improve sexual health and bring the subjects to discussion.”*

*There should be many more public relations activities concerning sexual health and sexual medicine: a respectful attitude towards sexuality and sexual relations must be developed. Media stakeholders and others should be aware of these issues. Social media should be used to reach adolescents and young adults.”*

**Lack of funds for research and sexual health services.** In total, 9 participants responded with this subcategory to the question regarding possible improvements in sexual health, and 9 participants considered this theme as an existing gap. These participants felt that government research funding for investing in fundamental sexual health is not adequately prioritized and that, *“Researchers have no support for valid studies of sexual life in our population.”* Three participants shared their concerns: *“There should be an increased emphasis on research about sexual health issues.”*, *“Increased emphasis on creating scientifically based sexual health intervention.”*, *“Financial support is a huge factor, and we should support our services and professionals to do the work they have trained for.”*

**Lawmaking and policies.** Altogether, 10 participants believed that possible improvements are required in this area of sexual health. These participants mentioned that the accomplishment of law governmental issues and its wide application should be improved, *“An EU-wide initiative focusing on sexuality education and sexual health, with a strong political support and a practical plan of action might have some positive influence.”* Some participants also mentioned local, national, and international agencies’ role in reaching the government and increasing the possibility of specialists’ cooperation to access worldwide solutions. As another participant summarized, *“All these interventions should be implemented in the framework of a national health strategy and discussed among stakeholders (NGO’s, activists, government agencies working with migrants, social services working with vulnerable people, etc.).”*

**Lack of well-educated professionals in the field of sexual medicine.** Taken together, 9 participants believe this subcategory of sexual health should be improved. According to this

sample of participants, an insufficient number of experts specialized in sexual problems in the educational, health, and social systems exist. These participants believe that, *“There should be more evidence-based education for students and professionals of sexual health issues both in basic training and in further education.”* More specifically, one participant wrote, *“Improvement can only be effected by a long-term pervasive, and comprehensive educational strategy offered to undergraduate and graduate levels at universities, backed up by government and institutions, focusing both on key persons (health care professionals, educators at all levels of the educational system, policymakers).”*

**Focus on vulnerable groups.** In total, 3 participants answered with this subcategory to the question concerning possible improvements, and 3 participants considered this theme as a gap in sexual health practice. The experts who mentioned this specific topic believe that the most important gap is connected to social-economic issues. One participant stated that, *“We should focus more on vulnerable and high-risk groups, such as migrants, minors, people who identify as lesbian, gay, bisexual, transgender, questioning, and/or queer (LGBTQ+), inmates, sex workers, men who have sex with men (MSM), people with disabilities, etc. and set up dedicated services.”* According to these experts, a failure to access hard to reach or hard to engage populations and for whom sexual health may not be usually considered a priority, exists. Therefore, one participant suggested, *“Humanitarian, social projects concerning minorities centered around sexual medicine should be developed.”*

**Sexual violence.** In total, 3 participants brought up sexual violence as a subcategory of sexual health that currently requires improvement. One participant mentioned, *“Sexual violence prevention interventions among middle school and high school students need improvement.”* Another respondent wrote, *“Victim groups should be protected by introducing comprehensive, legal arrangements and deterrent punishments should be imposed.”* One participant, in particular, emphasized that the focus should lay on preventing sexual violence and promoting

recovery from victimization by stating, “*We have paid a lot of attention to managing offenders and reducing the risk of further harm, but little attention has been paid to victims, particularly in the context of online child sexual abuse. There are no validated prevention programs in this area and no treatment programs that have been systematically assessed.*”

## **Discussion**

### **Critical Summary of the Findings**

This study aimed to a) establish an inventory of priority topics and b) achieve a consensus regarding the importance of the proposed topics relevant to sexual health. This was conducted through a Delphi study consisting of three rounds of feedback from a panel to explore what experts in sexology from a European-funded network believe should be prioritized in the area of sexual health.

Most participants deemed *Education* to be the most important overarching theme. All subtopics in this theme received agreement scores ranked in the top 10, two of which received the highest scores of the study. Education to youngsters (*Comprehensive sex education in schools*) as well as professionals in sexology (*Lack of well-educated professionals in the field of sexual medicine*) and experts in medicine (*Inclusion of sexual health into relevant medical health fields and educations*) is the basis and is required to achieve all elements essential to sexual health. Multi-dimensional paradigms, such as that demonstrated by Fortenberry (2013), in which sexual health—sexual desire, arousal, function, and behaviors—is considered part of general health, may more effectively and comprehensively guide such policies in sexual education. Most participants in our panel, however, are in professions in the research or education realm, which may play a role in their focus on education (see Table 1).

The over-arching category, *Sexual dysfunction and disease*, accentuates the medical position of sexual health with two of its subcategories, *Oncosexology* and *Reduced or low sexual desire* ranked in the top 5 most important topics of the study. Several participants work in health care

and clinical services, where loss and/or change in sex drive is among the most outstanding sexual health problems encountered in practice, whether or not secondary due to illness. However, in accordance with the WHO working definition (WHO, 2006), participants clearly acknowledged prioritizing the more psychological and sociological component of sexology in addition to mere medical issues, as outlined in *The neglect of psychosocial aspects of sexual health due to the focus on medical issues*.

Furthermore, the subsequent top 10 priorities listed by the panel reveal that sexual health exceeds the BPS paradigm and aligns with the WHO's working definition (WHO, 2006). Sexual health priorities refer to biological (physical health), psychological (emotions, experiences, cognitions...), and sociological (how sexuality is integrated in society) dimensions but also transcends the aforementioned. Aspects such as legal equality, power relations, a focus on pleasure, technology (the impact of media), research and service delivery exceed a rather narrow BPS approach. As sexual health is above all about the lives of individuals and the communities in which they live, a transdisciplinary approach grounded in the lived experiences of people as well as experts is paramount. According to the panel, more emphasis on a satisfying, safe, and pleasurable sexual life for those of a greater age is necessary. Therefore, the panel considers the *Sexuality of the elderly* as a top priority. The consensus additionally demonstrates the following items: the discrimination of women needs to be tackled and we should aim at *Gender equality*, *Sexual violence* is suggested as a top priority, and we should not *Neglect the positive aspects of sexuality*.

In addition, equally noteworthy results are the topics that immediately failed to reach consensus among the panel. Firstly, the overarching theme concerning minorities did not achieve high consensus scores, with *Access to sexual health information and clinical care among religious populations* and *Asexuality* scoring significantly low. According to our panelists, although society is more aware of asexuality, those with an asexual orientation are not considered the

main priority target group within the academic and clinical world. Because asexuality is a relatively rare sexual orientation, those in research and practice may not come into regular contact with this group. This may, additionally, explain why *Sexual paraphilias/delinquency* was ranked among the least prioritized topics. As opposed to the rights of elderly people to fulfilling sexuality and the support for youngsters to engage in such, the focus on people between these ages is relatively neglected (*Sexual health of those aged 30+*) by our participants. It is questionable whether this age group indeed suffers from the lower burden of problems. *Arranged marriages*, which could be obstacles to free choice with regard to sexuality, did not receive much attention in the current study. Sexuality is experienced and expressed in desires, fantasies, thoughts, attitudes, beliefs, roles, behaviors, values, and relationships (WHO, 2006). The public availability of sexuality in the media, and in particular through sex on the Internet, has led to even more liberalization of sexuality. A typical example is the public availability of pornography. Consequently, civil unrest began to grow about whether this increased availability would lead to an unacceptable trivialization of sexuality and an increase in violent behavior (Gijs et al., 2018). Despite this, according to our participants, the impact of *Pornography* is also not seen as a priority. Even though most researchers would agree on the importance and pervasiveness of pornography in recent decades, there are many empirical challenges in research framework on how to accurately appraise pornography usage in the population and gather data on such hard-to-measure behaviour. Also, one study has clearly shown how different researchers disagree on definitions, methodological approaches and data analysis (Litsou & Byron, 2020). These are just two potential reasons why we believe this issue was not high up on the experts' agenda.

This discussion focused on the 10 items that received the highest agreement scores (>80% agreement percentage) and on the 6 items with the lowest scores (>50% agreement percentage). The total list of the final 23 priority items can be found in Table 4. Additionally, we should also

pay attention to the 3 items that were contested in Round 2 (*Funds for sexual health services, Impact of lifestyle on sexual health, and Contraception*) with respective scores of 69.60%, 63.00%, and 60.90%. These three items scored just below the limit of the 70% cut-off score in Round 3, with an agreement percentage of 69.70% and therefore were not implemented in the final set of priority items.

In addition to the quantitative measurements related to priorities, in this study, an attempt to obtain as much information as possible from the experts about potential challenges, blind spots, demographic changes, new trends, etc., in sexual health was made. These rich answers can help to identify program options. *Sexual education in schools* and *Inclusion of sexual health into relevant medical health fields and educations* were again identified as the most important topics. A new topic, *Public awareness building* of the impact of sexuality on people's lives, was discussed elaborately by participants. Lastly, the panelists concluded that today a *Lack of funds for research and sexual health services* impedes their work, as most are employed in these areas.

Based on the answers of our participants, trained brokers could play an important role in involving diverse communities and developing effective educational modules, treatments, protocols, legal arrangements, and research agendas and funds. However, according to the participants, political awareness of the importance of continuous educational efforts has decreased in the last decades. Consequently, there is a lack of sexual education in both schools and further formal sexual health training in universities regarding initial training and continuing professional development. Therefore, many professionals feel uncomfortable discussing and/or treating different sexual health issues due to unsatisfactory basic sexual health education in the medical curriculum. Moreover, they do not feel knowledgeable about sexual health services and do not refer clients to specialists. This contributes to partial patient/physician communication and may result in patients not discussing sexual problems with their doctors.



The findings suggest a lack of a cross-disciplinary approach to sexual health issues and the need for a breakdown in the boundaries between academia, practitioners/clinicians, policymakers, and citizens. A multicomponent approach would entail developing sexual health services that are interdisciplinary, focus on efficient communication between health professionals and patients, involve brokers that cut across disciplines and services, invests in tackling misconceptions and that are oriented towards vulnerable groups. A European project should focus on taking these components into account when setting out a comprehensive policy for sexual health education.

### **Limitations**

As with any research, this study has several limitations. First, the study was based on a small sample size of a very specific group of experts. A larger expert panel could have produced slightly different findings. Moreover, the pool of experts was selected a priori by the researchers. Therefore, the panel selection constitutes a highly select group, namely topic experts from only one European network specialized in various areas related to sexual health. Within this expert pool, only willing participants were included. The data collection was held during a global pandemic when many countries were in lockdown, which could have influenced the results. While some participants might have had more time to complete the survey, others might not have considered participation in this study a priority. Therefore, this study cannot rule out (self-)selection bias of recruited experts and volunteer bias. As our study participants were primarily based in Europe, there is a potential issue of data reflecting a collection of responses corresponding to several domestic contexts, even though a collated approach to responses in our manuscript reveals pertinent transnational issues. In addition, as ESMN is dominated by experts in medical sciences, a more detailed and granular dataset regarding respondents' main disciplines and/or main areas of activity would provide a better perspective to the achieved consensus. Furthermore, the threshold for consensus agreement was determined

a priori (> 70%). Possibly a different threshold would have produced different agreements. An a priori limit of three rounds was additionally selected. Because the researchers introduced results from the previous round, convergence to a consensus of opinions typically occurs. Such a study may contain more than three rounds; however, time, cost, and possible participant fatigue need to be considered (Hasson et al., 2000; Rowe, Wright, & Bolger, 1991). Studies concentrating on the number of rounds required in a Delphi study to reach consensus reveal that most changes take place in the shift from the first to the second round (van Zolingen & Klaassen, 2003). Other authors have concentrated on participant burden as an obstacle and suggest that the response rates decline when there are four or more rounds. In addition, this article heavily fixates on consensus measurement, which is the most covered concept in Delphi techniques. However, the authors are familiar with Delphi studies that focus on dissent rather than consensus. The researchers are also aware of the fact that some biases might occur in Delphi studies that could alter the outcome. Research by Ecken, Gnatzy, and von der Gracht (2011) reports that desirability bias could affect Delphi studies' quality of decisions and hinder the realization of a 'true' consensus. Respondent anonymity may lead to a lack of accountability and a watered-down version of the best viewpoint (Powell, 2003). Nevertheless, these limitations are not unique to Delphi studies, as anonymous questionnaires and other approaches (i.e., focus groups, nominal groups, etc.) also run these risks. Lastly, the results were analyzed using content analysis, which requires an inevitable interpretation from the researchers. Choosing themes as units of analysis is subjective. Despite thorough discussions on the consensual inclusion of themes, decisions made may have framed the results.

### **Implications for Research and Practice**

To our knowledge, this study is the first Delphi study on identifying interdisciplinary, transnational sexual health priorities. The findings serve as an effort to define the barriers and restrictions and map out the current challenges, needs, and proposals within the professional

field with respect to the different disciplines involved. The panelists' concepts and recommendations may serve as the foundation and start of joint interdisciplinary work. The study can be considered innovative, as the findings document anonymously reached quantitative consensus between panelists (e.g., identifying priorities) and qualitative information (e.g., identifying common themes that underpin gaps and possible improvements). Consequently, the data can contribute to discussion and debate among professionals, including teachers, law enforcers, policymakers, researchers, health care providers, etc., to establish new opportunities, such as educational strategies. Numerous disciplines deal with sexuality separately; by joining professionals from multiple disciplines, a common hierarchy of specific priority topics in sexual health can be concluded. The findings of this study strongly indicate a need to focus on education. As such, the findings provide a potential framework to support and inform those schools and universities by providing them with all-encompassing, elaborative sex education based on scientific research with a positive view on sexual health. Policy changes are, therefore, required. Greater education may consequently result in awareness concerning the impact of sexual health on individuals and eventually positively impact many topics mentioned in this study, either directly or indirectly. Nevertheless, the least agreed items of this study should not be ignored, and further studies that question these results may clarify why some topics were not considered priorities. This study only included a select group of professionals, mainly engaged in research, education, and health practice. Therefore, a Delphi study not limited to professionals from these areas of expertise may agree on different priorities. Although the creators of the Delphi technique do not support random sampling and emphasize the importance of recruiting expert samples (Goodman, 1987), investing in sexual health is first and foremost to improve the sexual health of the population. Therefore, further studies reflecting the views of the general population may benefit this area of research. Lastly, future

research can focus on stimulating structured conflicts to compare opposing viewpoints and particularly concentrate on dissent-oriented analysis.

### **Conclusions**

Our results contribute to the field of sexual health research agenda and policy by bringing to the foreground the voice of an expert panel from existing members of the COST Action ESMN. This Delphi study resulted into a hierarchy of priority topics concerning sexual health and outlined a possible consensual research agenda for sexual health in the pan-European region. This study demonstrated the feasibility of transnational consensus research in the field of sexual health; given the importance of education in our findings, similar research investigating sexual health and sexuality education indispensable transversal components may be a priority. Research topics identified highlight how sexual health is now an umbrella term for a wide spectrum of sexuality-related challenges (i.e., education, sexual violence, sexual dysfunctions), modes of intervention, and key populations. In that sense, sexual health goes beyond the traditional medical paradigm, touching upon global health and social equality.

More specifically, prioritizing broader psychological and sociological components of sexual health and not merely narrow medical issues (as evidenced by responses in our study) acknowledges that we deal with a remarkably diverse field, which touches many different aspects of public health and the culture at large. Of course, additional research will be needed if our aim is to precisely evaluate potential successful outcomes of national priority setting based on studies like ours. We believe that information presented in this paper will further increase both interest and productive dialogue among sexual health researchers and professionals, but also educators, clinicians, healthcare professionals and many other pivotal stakeholders around the world.

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## References

- Bakker, F., & Vanwesenbeeck, I. (2006). *Seksuele gezondheid in Nederland 2006*. Delft, The Netherlands: Eburon.
- Bullough, V. L. (1998). Alfred Kinsey and the Kinsey report: Historical overview and lasting contributions. *Journal of Sex Research*, 35(2), 127–131. <https://doi.org/10.1080/00224499809551925>
- Davies, C. (2020). Poland’s Law and Justice party targeting sex education. *Lancet*, 395(10217), 17-18. [https://doi.org/10.1016/S0140-6736\(19\)33168-X](https://doi.org/10.1016/S0140-6736(19)33168-X).
- Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology*, 67(4), 401-409. <https://doi.org/10.1016/j.jclinepi.2013.12.002>
- de Graaf, R., & van der Vossen, R. (2013). Bits versus brains in content analysis. Comparing the advantages and disadvantages of manual and automated methods for content analysis. *Communications*, 38(4), 433-443. <https://doi.org/10.1515/commun-2013-0025>
- Ecken, P., Gnatzy, T., & von der Gracht, H. A. (2011). Desirability bias in foresight: Consequences for decision quality based on Delphi results. *Technological Forecasting and Social Change*, 78(9), 1654-1670. <https://doi.org/10.1016/j.techfore.2011.05.006>
- Edwards, W. M., & Coleman, E. (2004). Defining sexual health: A descriptive overview. *Archives of Sexual Behavior*, 33(3), 189-195. <https://doi.org/10.1023/b:aseb.0000026619.95734.d5>

- Flynn, K. E., Lin, L., Bruner, D. W., Cyranowski, J. M., Hahn, E. A., Jeffery, D. D., ... & Weinfurt, K. P. (2016). Sexual satisfaction and the importance of sexual health to quality of life throughout the life course of US adults. *The Journal of Sexual Medicine*, *13*(11), 1642-1650. <https://doi.org/10.1016/j.jsxm.2016.08.011>
- Ford, J. V., Corona Vargas, E., Finotelli Jr, I., Fortenberry, J. D., Kismödi, E., Philpott, A., Rubio-Aurioles, E., & Coleman, E. (2019). Why pleasure matters: Its global relevance for sexual health, sexual rights and well-being. *International Journal of Sexual Health*, *31*(3), 217-230. <https://doi.org/10.1080/19317611.2019.1654587>
- Fortenberry, J. D. (2013). The evolving sexual health paradigm: Transforming definitions into sexual health practices. *Aids*, *27*, S127-S133. <https://doi.org/10.1097/qad.0000000000000048>
- Gagnon, J. H., & Simon, W. (2017). *Sexual Conduct: The social sources of human sexuality* (2nd ed.). New York, NY: Routledge. <https://doi.org/10.4324/9781315129242>
- Giami, A. (2002). Sexual health: The emergence, development, and diversity of a concept. *Annual Review of Sex Research*, *13*(1), 1-35. <https://doi.org/10.1080/10532528.2002.10559801>
- Gijs, L., Aerts, L., Dewitte, M., Enzlin, P., Georgiadis, J., Kreukels, B., & Meulemans, E. (2018). Seksuologie: Een inleidend overzicht. In L. Gijs, L. Dewitte, P. Enzlin, J. Georgiadis, B. Kreukels & E. Meulemans (Eds.), *Leerboek Seksuologie* (3rd ed.) (p. 1–15). Houten, The Netherlands: Bohn Stafleu van Loghum. [https://doi.org/10.1007/978-90-368-1111-8\\_1](https://doi.org/10.1007/978-90-368-1111-8_1)
- Goodman, C. M. (1987). The Delphi technique: A critique. *Journal of Advanced Nursing*, *12*(6), 729-734. <https://doi.org/10.1111/j.1365-2648.1987.tb01376.x>

- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105-112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Greil-Soyka, M., Quayle, E., & Bitzer, J. (2020). European sexual medicine network: A unique platform for collaboration. *International Journal of Impotence Research*, 1-5. <https://doi.org/10.1038/s41443-020-0299-4>
- Gruskin, S., Yadav, V., Castellanos-Usigli, A., Khizanishvili, G., & Kismödi, E. (2019). Sexual health, sexual rights and sexual pleasure: Meaningfully engaging the perfect triangle. *Sexual and Reproductive Health Matters*, 27(1), 29-40. <https://doi.org/10.1080/26410397.2019.1593787>
- Hackett, S., Masson, H., & Phillips, S. (2006). Exploring consensus in practice with youth who are sexually abusive: Findings from a Delphi study of practitioner views in the United Kingdom and the Republic of Ireland. *Child Maltreatment*, 11(2), 146-156. <https://doi.org/10.1177/1077559505285744>
- Hasson, F., Keeney, S., & McKenna, H. (2000). Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, 32(4), 1008-1015. <https://doi.org/10.1046/j.1365-2648.2000.t01-1-01567.x>
- Hogben, M., Ford, J., Becasen, J. S., & Brown, K. F. (2015). A systematic review of sexual health interventions for adults: Narrative evidence. *Journal of Sex Research*, 52(4), 444-469. <https://doi.org/10.1080/00224499.2014.973100>
- Holt, E. (2021). Hungary's new LGBTQI legislation could harm HIV response. *The Lancet HIV*, 8(9), e527. [https://doi.org/10.1016/S2352-3018\(21\)00191-0](https://doi.org/10.1016/S2352-3018(21)00191-0).
- Lazdane, G. (2016). Editorial. *Entre Nous-The European Magazine for Sexual and Reproductive Health*, 85, 3.

- Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications*. Reading, MA: Addison-Wesley.
- Litsou, K., & Byron, P. (2020). Identifying the challenges of interdisciplinary research on pornography use. *Culture, Health & Sexuality*, 22(5), 599-613. <https://doi.org/10.1080/13691058.2019.1617898>
- Masters, W. H., & Johnson, V. E. (1966). *Human sexual response*. Boston, MA: Little Brown.
- Mustanski, B., Greene, G. J., Ryan, D., & Whitton, S. W. (2015). Feasibility, acceptability, and initial efficacy of an online sexual health promotion program for LGBT youth: The queer sex ed intervention. *The Journal of Sex Research*, 52(2), 220-230. <https://doi.org/10.1080/00224499.2013.867924>
- Nimbi, F. M., Rossi, R., Tripodi, F., Wylie, K., & Simonelli, C. (2019). A biopsychosocial model for the counseling of hormonal contraceptives: A review of the psychological, relational, sexual, and cultural elements involved in the choice of contraceptive method. *Sexual Medicine Reviews*, 7(4), 587-596. <https://doi.org/10.1016/j.sxmr.2019.06.005>
- Parish, S. J., & Clayton, A. H. (2007). Sexual medicine education: Review and commentary (CME). *The Journal of Sexual Medicine*, 4(2), 259-268. <https://doi.org/10.1111/j.1743-6109.2007.00430.x>
- Penwell-Waines, L., Wilson, C. K., Macapagal, K. R., Valvano, A. K., Waller, J. L., West, L. M., & Stepleman, L. M. (2014). Student perspectives on sexual health: Implications for interprofessional education. *Journal of Interprofessional Care*, 28(4), 317-322. <https://doi.org/10.3109/13561820.2014.884553>
- Powell, C. (2003). The Delphi technique: Myths and realities. *Journal of Advanced Nursing*, 41(4), 376-382. <https://doi.org/10.1046/j.1365-2648.2003.02537.x>



- Pugh, S. (2019). Politics, power, and sexual and reproductive health and rights: Impacts and opportunities. *Sexual and Reproductive Health Matters*, 27(2), 1-5.  
<https://doi.org/10.1080/26410397.2019.1662616>
- Rowe, G., Wright, G., & Bolger, F. (1991). Delphi: A reevaluation of research and theory. *Technological Forecasting and Social Change*, 39(3), 235-251.  
[https://doi.org/10.1016/0040-1625\(91\)90039-i](https://doi.org/10.1016/0040-1625(91)90039-i)
- Satcher, D., Hook, E. W., & Coleman, E. (2015). Sexual health in America: Improving patient care and public health. *Journal of the American Medical Association*, 314(8), 765-766. <https://doi.org/10.1001/jama.2015.6831>
- Snyder-Halpern, R. (2001). Indicators of organizational readiness for clinical information technology/systems innovation: a Delphi study. *International Journal of Medical Informatics*, 63(3), 179-204. [https://doi.org/10.1016/s1386-5056\(01\)00179-4](https://doi.org/10.1016/s1386-5056(01)00179-4)
- Stephenson, R., Lesco, G., Babii, V., Luchian, A., Bakunina, N., De Vasconcelos, A.S., Blondeel, K., Cáceres, C.F., Pitter, R.A., Metheny, N., Goldenberg, T., Kiarie, J., & Toskin, I. (2021). Provider attitudes towards a brief behavioral intervention for sexual health in Moldova. *BMC Public Health*, 21(1), 1469.  
<https://doi.org/10.1186/s12889-021-11490-5>
- Sumsion, T. (1998). The Delphi Technique: An Adaptive Research Tool. *British Journal of Occupational Therapy*, 61(4), 153-156.  
<https://doi.org/10.1177/030802269806100403>
- Swartzendruber, A., & Zenilman, J. M. (2010). A national strategy to improve sexual health. *Journal of the American Medical Association*, 304(9), 1005-1006.  
<https://doi.org/10.1001/jama.2010.1252>
- van Driel, M., Gijs, L., Laan, E., & van Lankveld, J. (2018). Geschiedenis van de seksuologie: paradigma's, thema's en debatten. In L. Gijs, L. Dewitte, P. Enzlin, J. Georgiadis,

B. Kreukels & E. Meulemans (Eds.), *Leerboek Seksuologie* (3rd ed.) (p. 15–36). Houten, The Netherlands: Bohn Stafleu van Loghum. [https://doi.org/10.1007/978-90-368-1111-8\\_2](https://doi.org/10.1007/978-90-368-1111-8_2)

van Zolingen, S. J., & Klaassen, C. A. (2003). Selection processes in a Delphi study about key qualifications in senior secondary vocational education. *Technological Forecasting and Social Change*, *70*(4), 317-340. [https://doi.org/10.1016/s0040-1625\(02\)00202-0](https://doi.org/10.1016/s0040-1625(02)00202-0)

von der Gracht, H. A. (2012). Consensus measurement in Delphi studies: Review and implications for future quality assurance. *Technological Forecasting and Social Change*, *79*(8), 1525-1536. <https://doi.org/10.1016/j.techfore.2012.04.013>

Veugelers, R., Gaakeer, M.I., Patka, P. & Huijsman, R. (2020). Improving design choices in Delphi studies in medicine: the case of an exemplary physician multi-round panel study with 100% response. *BMC Medical Research Methodology*, *20*, 156. <https://doi.org/10.1186/s12874-020-01029-4>

World Health Organization. (2006). *Defining sexual health: Report of a technical consultation on sexual health, 28-31 January 2002*. Geneva, Switzerland: World Health Organization. Retrieved from [https://www.who.int/reproductivehealth/publications/sexual\\_health/defining\\_sh/en/](https://www.who.int/reproductivehealth/publications/sexual_health/defining_sh/en/)

Yilmaz, V., & Willis, P. (2020). Challenges to a Rights-Based Approach in Sexual Health Policy: A Comparative Study of Turkey and England. *Societies*, *10*(2), 33. <https://doi.org/10.3390/soc10020033>

Table 1

*Participant demographics at each round of the Delphi study*

Demographics	Round 1 n (%)	Round 2 n (%)	Round 3 n (%)
Mean Age (Range)	49,80 (32-77)	51,07 (32-77)	50,52 (32-68)
<b>Gender</b>			
Male	20 (40.00%)	21(45.65%)	14 (42.42%)
Female	30 (60.00%)	23 (50.00%)	17 (51.52%)
<b>Professional Sector</b>			
Health care & Clinical practice	25 (50.00%)	25 (54.35%)	17 (51.52%)
Well-being & Clinical services	2 (4.00%)	1 (2.17%)	1 (3.03%)
Education	28 (56.00%)	27 (58.70%)	19 (57.58%)
Research	35 (70.00%)	28 (60.90%)	19 (57.58%)
Public administration	1 (2.00%)	1 (2.17%)	0 (0.00%)
Currently not active	0 (0.00%)	0 (0.00%)	0 (0.00%)
Other	0 (0.00%)	0 (0.00%)	0 (0.00%)
<b>Total</b>	<b>50 (100%)</b>	<b>46 (100%)</b>	<b>33 (100%)</b>

Table 2

*Overarching categories and ratings of subcategory items at Round 2 and Round 3*

Items Round 2	Mean	Median	SD	IQR	% (n)
<b>1. Sexual dysfunction and disease</b>					
Oncosexology and sexuality in chronic diseases	4.45	5	0.697	1	89.10 (41)
Reduced or low sexual desire	4.52	5	0.698	1	89.10 (41)
Pain during intercourse	4.09	4	0.936	1	78.30 (36)
Erectile dysfunction	4.02	4	0.849	1	76.10 (35)
Female orgasms	4.02	4	0.963	1	69.60 (32)
<b>2. Sexual and reproductive health and rights</b>					
Reproductive rights of women	4.29	5	0.844	1	71.80 (33)
Female sexual health	4.09	4	0.868	1	71.80 (33)
Gender equality	4.02	4	0.952	2	63.00 (29)
Contraception	4.02	4	1.058	2	60.90 (28)
Arranged marriages	3.65	4	1.051	1	47.80 (22)
<b>3. Age and developmental perspectives</b>					
Sexuality in the elderly	4.34	5	0.805	1	80.40 (37)
Teenage marriages and pregnancies	3.67	4	1.040	2	52.20 (24)
Sexual health of those aged 30+	3.45	3	1.022	1	45.70 (21)
<b>4. Sexual well-being</b>					
The neglect of psychosocial aspects of sexual health due to the focus on medical issues	4.40	4	0.623	1	87.00 (40)
Communication between partners in relationships	3.98	4	0.927	1	73.90 (34)
Lack of data about sexual health	3.75	4	0.866	0	73.90 (34)
Neglect of positive aspects of sexuality	4.02	4	0.831	2	67.40 (31)
Impact of lifestyle on sexual health	3.86	4	1.025	2	63.00 (29)
<b>5. STIs and HIV</b>					
Prevention of sexually transmitted infections	4.32	4	0.789	1	76.10 (35)
HIV-aids prevention	4.05	4	0.959	1	65.20 (30)
<b>6. Vulnerable and minority populations</b>					
Sexual minority group of LGBTQ+ individuals	4.10	4	0.983	1	71.70 (33)
Sexuality and physical or mental disabilities	4.05	4	0.909	2	71.70 (33)
Sexual health within socioeconomic vulnerable groups	3.95	4	0.854	1	69.60 (32)
Sexuality and migration	3.85	4	0.844	1	63.00 (29)
Access to sexual health information and clinical care among religious populations	3.24	3	1.067	1	39.10 (18)
Asexuality	3.08	3	1.047	2	32.60 (15)
<b>7. Sexual violence and delinquency</b>					
Sexual violence	4.58	5	0.545	1	91.30 (42)
Child sexual abuse	4.14	4	0.872	1	76.10 (35)
Sexual paraphilias/delinquency	3.69	4	1.104	2	47.80 (22)
<b>8. Media</b>					
The internet and overall mass media	4.09	4	0.750	1	71.70 (33)
Pornography	3.57	4	1.107	2	47.80 (22)
<b>9. Education</b>					
Inclusion of sexual health into relevant medical health fields and educations	4.66	5	0.479	1	95.70 (44)

Comprehensive sex education in schools	4.73	5	0.499	1	93.40 (43)
Lack of well-educated professionals in the field of sexual medicine	4.28	4	0.766	1	80.40 (37)
<b>10. Sexual health-related services and -policy</b>					
Accessibility of sexual health services	4.19	4	0.740	1	78.30 (36)
Funds for sexual health services	4.05	4	0.773	1	69.60 (32)
Available sexual health services covered by health insurances	3.85	4	0.933	2	50.00 (23)
Items Round 3	Mean	Median	SD	IQR	% (n)
<b>1. Sexual dysfunction and disease</b>					
Female orgasms	4.27	4	0.828	1	75.70 (25)
<b>2. Sexual and reproductive health and rights</b>					
Gender equality	4.31	4	0.821	1	87.90 (29)
Contraception	3.97	4	0.948	1	69.70 (23)
<b>3. Age and developmental perspectives</b>					
Teenage marriages and pregnancies	3.79	4	1.067	2	54.50 (18)
<b>4. Sexual well-being</b>					
Neglect of positive aspects of sexuality	4.34	4	0.701	1	84.90 (28)
Impact of lifestyle on sexual health	3.94	4	0.878	1	69.70 (23)
<b>5. Std's and HIV</b>					
HIV-aids prevention	4.00	4	1.035	2	60.60 (20)
<b>6. Vulnerable and minority populations</b>					
Sexuality and migration	3.79	4	0.861	1	63.70 (21)
Sexual health within socioeconomic vulnerable groups	3.87	4	1.024	2	63.60 (21)
<b>7. Sexual health-related services and -policy</b>					
Funds for sexual health services	4.07	4	0.884	1	69.70 (23)
Available sexual health services covered by health insurances	4.00	4	0.926	2	63.60 (21)

Table 3

*Hierarchy list of subcategory items after round 3*

Items after round 3	Mean	Median	SD	IQR	%	Rating rounds
Inclusion of sexual health into relevant medical health fields and educations	4.66	5	0.479	1	95.70	1
Comprehensive sex education in schools	4.73	5	0.499	1	93.40	1
Sexual violence	4.58	5	0.545	1	91.30	1
Oncosexology and sexuality in chronic diseases	4.45	5	0.697	1	89.10	1
Reduced or low sexual desire	4.52	5	0.698	1	89.10	1
Gender equality	4.31	4	0.821	1	87.90	2
The neglect of psychosocial aspects of sexual health due to the focus on medical issues	4.40	4	0.623	1	87.00	1
Neglect of positive aspects of sexuality	4.34	4	0.701	1	84.90	2
Sexuality in the elderly	4.34	5	0.805	1	80.40	1
Lack of well-educated professionals in the field of sexual medicine	4.28	4	0.766	1	80.40	1
Pain during intercourse	4.09	4	0.936	1	78.30	1
Accessibility of sexual health services	4.19	4	0.740	1	78.30	1
Erectile dysfunction	4.02	4	0.849	1	76.10	1
Prevention of sexually transmitted diseases	4.32	4	0.789	1	76.10	1
Child sexual abuse	4.14	4	0.872	1	76.10	1
Female orgasms	4.27	4	0.828	1	75.70	2
Communication between partners in relationships	3.98	4	0.927	1	73.90	1
Lack of data about sexual health	3.75	4	0.866	0	73.90	1
Reproductive rights of women	4.29	5	0.844	1	71.80	1
Female sexual health	4.09	4	0.868	1	71.80	1
Sexual minority group of LGBTQ+ individuals	4.10	4	0.983	1	71.70	1
Sexuality and physical or mental disabilities	4.05	4	0.909	2	71.70	1
The internet and overall mass media	4.09	4	0.750	1	71.70	1
Contraception	3.97	4	0.948	1	69.70	2
Impact of lifestyle on sexual health	3.94	4	0.878	1	69.70	2
Funds for sexual health services	4.07	4	0.884	1	69.70	2
Sexuality and migration	3.79	4	0.861	1	63.70	2
Sexual health within socioeconomic vulnerable groups	3.87	4	1.024	2	63.60	2
Available sexual health services covered by health insurances	4.00	4	0.926	2	63.60	2
HIV-aids prevention	4.00	4	1.035	2	60.60	2
Teenage marriages and pregnancies	3.79	4	1.067	2	54.50	2
Arranged marriages	3.65	4	1.051	1	47.80	1
Sexual paraphilias/delinquency	3.69	4	1.104	2	47.80	1
Pornography	3.57	4	1.107	2	47.80	1
Sexual health of those aged 30+	3.45	3	1.022	1	45.70	1
Access to sexual health information and clinical care among religious populations	3.24	3	1.067	1	39.10	1
Asexuality	3.08	3	1.047	2	32.60	1

Table 4

*Priority list of overarching categories and subcategory items*

Items that gained $\geq 70\%$ consensus from the panel of experts	Rating rounds
<b>1. Sexual dysfunction and disease</b>	
Oncosexology and sexuality in chronic diseases	1
Reduced or low sexual desire	1
Pain during intercourse	1
Erectile dysfunction	1
Female orgasms	2
<b>2. Sexual and reproductive health and rights</b>	
Reproductive rights of women	1
Female sexual health	1
Gender equality	2
<b>3. Age and developmental perspectives</b>	
Sexuality in the elderly	1
<b>4. Sexual well-being</b>	
The neglect of psychosocial aspects of sexual health due to the focus on medical issues	1
Communication between partners in relationships	1
Lack of data about sexual health	1
Neglect of positive aspects of sexuality	2
<b>5. STIs and HIV</b>	
Prevention of sexually transmitted infections	1
<b>6. Vulnerable and minority populations</b>	
Sexual minority group of LGBTQ+ individuals	1
Sexuality and physical or mental disabilities	1
<b>7. Sexual violence and delinquency</b>	
Sexual violence	1
Child sexual abuse	1
<b>8. Media</b>	
The internet and overall mass media	1
<b>9. Education</b>	
Inclusion of sexual health into relevant medical health fields and educations	1
Comprehensive sex education in schools	1
Lack of well-educated professionals in the field of sexual medicine	1
<b>10. Sexual health-related services and -policy</b>	
Accessibility of sexual health services	1

Figure 1. Number of included, excluded and rerated items.

