

The Meaning of Living for Men Suffering From Primary Hyperhidrosis

Alexander Shayesteh¹ , Christine Brulin²,
and Elisabet Nylander¹

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Abstract

Primary hyperhidrosis means excessive focal sweating and it has a negative effect on the mental health of those affected. Although there is no gender difference regarding the prevalence of the disease, men are less likely to seek help for this condition. The aim of this study was to explore the meaning of living with primary hyperhidrosis in men. Interviews with 15 men, selected by purposive sampling, were performed at Umeå University Hospital in Sweden between June 2016 and October 2017, and analyzed using qualitative content analysis technique according to Graneheim and Lundman (2004). This study found one theme, namely, *to be captured in a filthy body*, based on the categories: surrender to the condition reluctantly; prepare for a sweat attack; withdraw from close contacts; and worry about others' perceptions. The theme describes men living with hyperhidrosis feeling filthy while they struggle to control or hide the excessive sweating. Insufficient understanding from others and being reminded from the sweating is stressful and results in a sense of captivity. Interpreting the result, we conclude that the disease could stigmatize the individual, which has a negative effect on mental health and the will to seek help. Meanwhile, providing information about the disease early, as in schools, could increase the willingness of men to seek medical help. The results of this study also reinforce quantitative studies reporting the negative effects of primary hyperhidrosis on mental health.

Keywords

general health and wellness, health-related quality of life, access to care, health awareness, qualitative research

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Excessive sweating that is more than physiologically required is called hyperhidrosis. Primary hyperhidrosis is focal and without an apparent cause, while secondary hyperhidrosis often occurs in the presence of an underlying medical condition (Stolman, 2003). Primary hyperhidrosis is a common disease in men and women with varying prevalence across the world: 4.8% in United States (Doolittle et al., 2016), 5.5% in Sweden (Shayesteh et al., 2016a), and 12.76 % in Japan (Fujimoto et al., 2013).

Primary hyperhidrosis begins in adolescence and manifests itself in the armpits followed by the palms and soles (Strutton et al., 2004). The cause for primary hyperhidrosis is unknown (Schlereth et al., 2009). While some authors have reported a hereditary cause (Ro et al., 2002), others have suggested an increased load from the autonomous nervous system toward the eccrine sweat gland as a mechanism for the excessive sweating (Iwase et al., 1997).

Methods for diagnosing hyperhidrosis by measuring the sweat production are time consuming and seldom used in clinical practice. Instead, it is more common that

the patient's medical history is used for diagnosis (Hornberger et al., 2004). Using the medical history takes less time and enables the clinician to differentiate primary from secondary hyperhidrosis. Although the medical history could suffice for diagnosis, determining the severity of hyperhidrosis requires a more structured measurement. This is provided by the Hyperhidrosis Disease Severity Scale (HDSS), which is a 4-point-scale self-assessment that has been validated against quantitative methods and scales that measure the quality of life in patients with primary hyperhidrosis (Hornberger et al., 2004).

¹Department of Public Health and Clinical Medicine, Dermatology and Venereology, Umeå University, Sweden

²Department of Nursing, Umeå University, Sweden

Corresponding Author:

Alexander Shayesteh, Department of Public Health and Clinical Medicine, Dermatology and Venereology, Umeå University, Umeå, Västerbotten SE-90186, Sweden.

Email: alexander.shayesteh@regionvasterbotten.se



Table 1. Inclusion and Exclusion Criteria for the Study.

Study Parameters	Inclusion Criteria	Exclusion Criteria
Recruitment	Within the county	Outside the county
Diagnosis	Primary hyperhidrosis	Secondary hyperhidrosis Multifocal > 2 sweating sites
Hyperhidrosis Disease Severity Scale (HDSS)	>2 points	≤2 points
Treatment	No treatment for at least 1 year prior to the interview	Treated within 1 year of the interview

The majority of patients with hyperhidrosis use topical creams or ointments to ameliorate their sweating problems (White, 1986; Hornberger et al., 2004). In more difficult cases, treatments such as anticholinergics, botulinum toxin injections, or removal of the sweat glands are recommended. Surgical procedures such as cutting the signals from the autonomous nervous system toward the sweat gland are an option but are seldom used and reserved only for the most severe cases (Stolman, 2003).

Individuals with primary hyperhidrosis often report that the sweating disrupts the occupational, physical, and social interactions in their daily activities (Swartling et al., 2001). Shame, social detachment, and being considered a nervous individual have negative effects on mental health and reduce quality of life (Hamm et al., 2006; Shayesteh et al., 2016b). Primary hyperhidrosis does not increase the risk of depression or general anxiety disorder but causes stress and creates anxiety before and during social activities (Ruchinkas et al., 2002; Weber et al., 2005). In a study by Hamm et al. (2006), it was reported that quality of life reduction in patients with primary hyperhidrosis was comparable to other diseases such as moderate psoriasis, atopic dermatitis, pruritus, and contact dermatitis. Comparing diseases can be problematic for many reasons but could provide a better understanding of how an unknown disease affects those suffering from it.

Difficulties in obtaining treatment and finding adequate patient information have also been described as stressful for patients with primary hyperhidrosis (Kamudoni et al., 2017). Providing more information about a disease could contribute to an increased awareness about it, but there are also reports that individuals with primary hyperhidrosis, men in particular, seldom seek healthcare for their sweating problems (Hamm et al., 2006; Lear et al., 2007; Shayesteh et al., 2016a). It has been reported that men experience less interference from dermatological diseases in their sex life, psychosocial health, and relations compared to women (Ginsburg, 1996). The pattern of seeking healthcare in men is different, often supported by a female partner and related to a specific problem rather than concern about their general

health (Tudiver & Talbot, 1999). A study examining dermatological treatment in Sweden reported that more public healthcare resources are spent on men than women (Nyberg et al., 2008). This is not so for primary hyperhidrosis, since women more often seek healthcare and treatment than men (Lear et al., 2007; Shayesteh et al., 2016b).

Primary hyperhidrosis has been given little attention by the research community. Most studies regarding hyperhidrosis focus on self-rated quality of life, which do not give a holistic view of the problems associated with the disease. Thus, the aim of this study was to explore the meaning of living with primary hyperhidrosis in men. This study will improve the knowledge in the field, which is of utmost importance in order to give professionals insight in men's everyday life living with extreme sweating. Such knowledge will further improve treatment of the problems without delay, which in turn should improve life for men living with the disease.

Method

Participants

Participants were recruited in a nonprobability sample (purposive sampling) in which those who had lived with hyperhidrosis the longest were prioritized. A total of 30 men were asked to participate; however, 15 declined due to their life situation, work, traveling distances, and other reasons. The criteria for the study and the characteristics of the participants are explained in Tables 1 and 2, respectively.

Data Collection

To explore the meaning of men living with primary hyperhidrosis, the participants were in-depth interviewed according to principles for using qualitative content analysis (Graneheim & Lundman, 2004). An interview guide was constructed based on research and clinical experience within the research group. The purpose of the guide was to discuss topics such as the participants' experiences and thoughts living with the disease at present, in

Table 2. Characteristics of the Participants Presented in Median (md) or Number (n).

Men (n)	15
Age (md)	32
Age at onset (md)	14
Marital status (n)	
Married	2
Partnership	8
Single	5
Occupation (n)	
Light physical work	10
Heavy physical work	5
Hyperhidrosis (n)	
Axillary	7
Palmar	4
Plantar	1
Axillary and palmar	3

childhood, and during adolescence. Within the topics, descriptions and actual examples of situations were asked for and added to the narrative to enrich the interviews. Examples of questions asked were “Can you describe your experiences of having hyperhidrosis?” or “Can you give an example of a situation in which your sweating became a problem?”

All interviews were performed by the first author (AS). The procedure and techniques used for interviewing Participant 1 and Participant 2 were reviewed with senior members of the research group (CB and EN). An additional review regarding the interview guide itself and interview techniques and questions was performed at the Department of Nursing, Umeå University, Sweden by a group of professionals well acquainted with content analysis. Suggested changes, such as more follow-up questions and longer pauses, were implemented by the first author, who used a process of continuous refinement in the interviews done. After each interview, the first author summarized the content of the interview with the participant to minimize any misunderstandings.

The transcription of one interview was done by the first author, while all other transcriptions were made by medical secretaries at the Department of Dermatology and Venereology, Umeå University Hospital, Sweden. The interviews lasted 30–50 min each and were recorded by Olympus digital voice recorder VN-5500PC Olympus Imaging Europa GMBH Hamburg, Germany.

Data Analysis

Data regarding the aim of the study were primarily analyzed by the first author. All co-authors contributed to all steps of the processes of coding, categorizing, and theme constructing from the data.

An inductive approach to data analysis was taken and data were organized and analyzed with content analysis in accordance with Graneheim and Lundman (2004). Content analysis explores similarities and differences between parts of a text, enabling the analysis of the descriptive and the interpretative content (Graneheim et al., 2017).

The process of content analysis starts with condensing a unit of analysis, an interview, a diary, or some other material in research (Graneheim & Lundman, 2004). In this study, each unit of analysis, being a transcribed interview, was condensed and shortened with its core intact. The condensed text which contained units of meaning; these units, whether several words, sentences, or paragraphs, were identified and labeled with codes (Krippendorff, 1980). Smaller groups of related codes were assimilated into subcategories, relating to each other through their content (Graneheim & Lundman, 2004). In this process, codes with the same commonality and related to a specific subcategory were not excluded nor could they fall between two subcategories (Krippendorff, 1980). Abstracting subcategories into categories, and finally, a theme acting as a metaphor for men’s suffering from primary hyperhidrosis was performed by applying a higher logical order in the process according to Graneheim and Lundman (2004). In content analysis, the theme should relate to the interpretive content, answering the question of “how, why or in what way” and be very descriptive in their form while categories are factual and relate to the descriptive content answering the question of “what” (Graneheim & Lundman, 2004).

During the process of content analysis, it is important to be aware that interpretation and ones influence on the data is inevitable (Sandelowski, 1995). This means that higher levels of abstraction and interpretation could provide better explanations, but it could also increase challenges to credibility and authenticity of the conclusions. It is therefore necessary to show the logic of the constructions, in relation to the aim of the study, which has been described in our findings.

Rigor

Trustworthiness was ensured by ongoing discussions between the authors and in accordance with Lincoln and Guba (1985). To ensure credibility, an adequate number of participants was planned for and adequate quotes from the participants were used to strengthen the results. Dependability was addressed throughout the analysis by the authors reflecting, discussing, and moving back and forth within the text and its parts until consensus was achieved. Engaging in reflexivity was important since the first author works in the field of hyperhidrosis, which may have helped but also created an uncomfortable

Table 3. Theme, Categories, and Subcategories Regarding Men With Primary Hyperhidrosis.

Theme	Categories	Subcategories
To be captured in a filthy body	Surrender to the condition reluctantly	Illness resignation Feeling stressed and anxious Having low self-esteem
	Prepare for a sweat attack	Being reminded of the disease Customizing the attire to hide Creating possible ways out
	Withdraw from close contacts	Avoiding exacerbating situations Feeling vulnerable while being intimate Feeling odd or singled-out
	Worry about others' perceptions	Worrying about the first impression Noticing others' ignorance Difficulties in finding support

situation for the two participants who had earlier been treated by the first author. However, all data and findings were discussed within the research group and with experienced researchers in the field of content analysis, thereby minimizing any possible biases that could have arisen.

Ethical Considerations

The study was approved by the Regional Ethical Review Board, Northern Sweden in May 2016, Decision no. 2016-242-32M. The right to autonomy, dignity, informed consent, voluntariness, and confidentiality for all participants was respected. Participants received information about the study via mail and were contacted by telephone a week later for oral consent. Written consent was obtained on the day of the interview. All interviews were performed at a mutually agreed-upon time at Umeå University Hospital, Sweden between June 2016 and October 2017. A neutral conference room was used for this purpose. At the beginning of each interview, the participant was again informed about the study and the purpose of the interview. Each individual was assigned an identification number known only by the first author.

Findings

The analysis of the data resulted in one theme, four categories, and 13 subcategories (Table 3).

To Be Captured in a Filthy Body

Qualitative content analysis of exploring the meaning of living with primary hyperhidrosis in men resulted in the theme *to be captured in a filthy body*. This theme was based on categories I. Surrender to the condition reluctantly; II. Prepare for a sweat attack; III. Withdraw from

close contacts; and IV. Worry about others' perceptions. The theme describes men's experiences of feeling unclean or filthy while they struggle to control or hide the excessive sweating. Insufficient understanding from others and reminders of their sweating create stress and anxiety, which result in a sense of captivity.

Surrender to the Condition Reluctantly. The first category, *surrender to the condition reluctantly*, was based on their not knowing what normal or abnormal sweat production was. Continuous sweat problems, stress, and anxiety from situations exposing the sweat to others, along with decreased self-esteem due to attributions associated with a person suffering from excessive sweating, all contributed to a state of surrendering to the disease.

Illness Resignation. The participants described being unaware of the nature of their condition when they were young and believed that the symptoms would disappear once they passed adolescence. However, when it became clear later on that the disease would not reside, they had to reconcile themselves with the thought of living with the symptoms. "In adolescence you think yeah it's a phase that you have to go through but later, you just reconcile with it and try to make the most out of the situation." (Participant #10)

While it was not possible for the participants to overcome the sweating problems, avoiding and adapting to situations or activities that could expose the sweating was described as an example of managing the condition. "I have realised that it is not possible to, that I cannot win over this and instead I have begun to refrain from some situations." (Participant #1)

Feeling Stressed and Anxious. The sweating problems were reported to create stress and anxiety before or during social situations or interactions. Thinking about a social

activity such as a trip, a presentation, or an individual performance in front of others was often associated with anxiety. While anxiety about sweating in a specific situation was easier to manage, it was more difficult to decide about future plans such as a career or certain choices in life. These choices were described as decisively leading them down a different path had the sweating problems not existed. “It has been difficult to the extent that I believe it has affected my work and my career. I think I avoid certain things that are too difficult, certain assignments; official contexts, conferences, seminars, lectures, those situations.” (Participant #12)

Stress was often reported in situations involving social life. The ability to write on a piece of paper or grip something such as a computer mouse or a musical instrument was sometimes reduced, depending on where the sweating occurred. Other areas where grip ability could create problems were dancing, holding hands, or in sports such as wrestling, climbing, or lifting weights in the gym. Daily situations such as opening cans or shaking hands were reported to be stressful. In addition, choosing clothes to wear and finding ways to conceal sweat marks were reported as both stressful and time consuming. Both stress and sweat production were exacerbated during interactions with the opposite sex where there was a risk of exposure. “When I was younger, I didn’t expose myself to situations such as having a girlfriend and holding her hand.” (Participant #1)

Having Low Self-esteem. Continuous sweat problems affected self-esteem and reduced it so that one’s self-image became associated with attributes such as embarrassment, shame, disgust, smelling bad, being uncomfortable, and feeling wet all the time. These beliefs about one’s self-image were described as problematic and consumed both time and thought in daily life. “I always go by the mirror and take a look because I know there are sweat marks in my armpits. To look sweaty is worse than sweating.” (Participant #7)

The concern over managing situations or being a step ahead of situations in which sweating could occur reduced the motivation to participate in social gatherings or activities other than work or studies. “The sweating restricts me, and I don’t have much motivation to do things in my free time.” (Participant #14)

Prepare for a Sweat Attack. The second category, *prepare for a sweat attack*, was based on the individual’s being reminded that sweating could be experienced in any situation at school, home, or work. These reminders led to the patients’ customizing their attire so that they could find possible ways out of a situation and conceal the symptom.

Being Reminded of the Disease. The symptoms of hyperhidrosis can be noticeable both to the individual

and in the surroundings. Usually, sweat pearls appearing on the skin or sweat marks on clothing interfered with any activity taking place. “When I am working, I try to look through the sweat on my glasses. We do have sweatbands on our helmets but that will stop functioning after a while. Also, to have both your own clothes and protective welding overall that is fireproof makes you warm when you move. It is no fun to bath in sweat when you work.” (Participant #8)

Direct remarks about sweat marks on clothing or subtle references to such marks were reminders of the condition. “It was difficult in school, in activities when we used our hands such as dance. Someone could have commented Oh! How cold or wet you are.” (Participant #13)

Customizing the Attire to Hide. Characteristics of clothing such as color, material, and pattern were important to conceal sweat marks. Black or white colors were preferred, while light red, pink, or light blue were said to reveal the sweat marks more easily. Thicker clothes were more favored; however, they were less comfortable once they got soaked. Long-sleeved shirts or sweaters helped to conceal and stop the smell, as did wearing several items of clothing on top of each other to achieve the thickness desired. “The sweating has disturbed me pretty much in the social life. I always have to use black or white and wearing a lot of clothes on each other.” (Participant #3)

Another remark was about wear and tear on clothes since they had to be washed on a daily basis. At times, several of the same items were purchased to act as reserves. “For example, t-shirts, I can’t use it more than a day. That’s an issue. It seems like it’s nothing, but that’s an issue because you must change clothes each day. You have to do more frequently laundry.” (Participant #5)

Creating Possible Ways Out. Adapting attire and avoiding exacerbating situations were methods for managing the disease. Other methods, such as regulating the temperature inside a building, taking off shoes at work, wearing sandals, or using short breaks to change clothes, prevented an exacerbation of sweat production. Having greater freedom at work to do things at one’s own pace reduced the sweating problem and its consequences. “I am in control of my own time at work. I have an assignment to do and how I do it I decide myself. In difficult times with regard to sweating, I can work less and in other times I can work more. It is this freedom that enables the disease to stay calm somehow.” (Participant #1)

Planning ahead of an event or a trip increased the feeling of security and reduced moments of uncertainty. However, too much planning restricted the spontaneity in situations such as intimacy. “Sometimes I wanted to be close to my former partners, lay beside and hold them, but I couldn’t. I had to go and wash myself and make it

dryer so that. . . You can't do anything spontaneous." (Participant #10)

Withdraw From Close Contacts. The third category, *withdraw from close contacts*, was based on avoiding public or social situations where there was a risk of increased sweat production. Managing sweat production or trying to be a step ahead of it by reducing the risks could single out the individual as acting or being odd.

Avoiding Exacerbating Situations. It was reported that voluntary situations outside of work or school that could cause stress and anxiety were rather avoided. Any exposure to a stressful situation could create a risk of getting caught up in a vicious circle of symptoms, anxiety, and further exacerbating symptoms that would restrict contacts with others in the proximity. "I remember when I used my bicycle to school. I was already wet when I got there although I had not put any effort into it. Then I sat in class and tried to hide myself for an hour. I went to the toilet to dry my skin, but the sweating did not stop. I went back to the class, sat there and thought about the situation which made me sweat even more. It is a vicious circle in some way. When you start sweating then it often gets worse." (Participant #7)

A situation that was part of a job or an activity that had to be done, such as examining a patient with sweaty palms as a physiotherapist, was simply endured since no other options were possible. "It is in moments of physical contact with the patient that I feel it affects me. However, it is nothing I complain about or apologise to the patient for. I just let it be." (Participant #2)

Feeling Vulnerable While Being Intimate. Hyperhidrosis did not prevent intimacy; however, it limited the individual's behavior during different acts of intimacy. Using the dorsal side of the hand instead of the palm to caress and minimizing the duration of close body contact with someone were two methods for reducing sweat production. Taking a shower before being intimate did not help for more than a few minutes, while being flexible regarding postures and being able to maneuver freely in a given space were described as helpful. "Some positions work better than others. I try to have my back free, not to lay down with my back on the bedsheets." (Participant #8)

Intimacy was also stressful if the sweating interfered in the act or in a sensitive situation. Not being able to cover the sweat during intercourse reduced self-esteem and created a feeling of unnecessary exposure. To sweat excessively in intimate situations was explained as understandable but seldom acceptable to the partners of those affected. "I have gotten remarks about my sweatings in intimate situations. It can be different, people become aware of it, but few accept it." (Participant #4)

Feeling Odd or Singled-out. The visual effects of hyperhidrosis could draw attention to the individual, creating feelings of embarrassment and being unclean, which in turn singled-out the individual with the sweating problem. "The sweating could reach to a point where you were like under a shower, that extreme thing is not acceptable. I wouldn't accept it to be shown in front of people which would be quite embarrassing because you would draw attention to yourself. What's wrong with this guy?" (Participant #5)

One's behavior, the attire worn, or the adaptations taken in the surroundings could be perceived by others as odd or strange, which could result in name calling or other unwanted comments.

"I haven't told them at work. I would be called the sweater or such nick names and that can happen fast." (Participant #3)

Worrying About Others' Perceptions. The fourth category, *worrying about others' perceptions*, was based on the first impression one makes on others and being aware of the ignorance family members or friends displayed about the disease. How others perceived sweating problems often created a sense of not being understood or failing to find support for the problem. For those who were able to find help within the healthcare system, treatment enabled them to discuss their condition with others without any consequences because they then had no symptoms.

Worrying About the First Impression. First impressions were described as important for establishing contact and building up relationships with others. Shaking hands was a major problem for patients with palmar hyperhidrosis. "The first impression means so much and you often have to shake hands. It affects you to a certain degree, but you learn to live with it." (Participant #6)

In plantar hyperhidrosis, taking off shoes to enter a house and leaving sweat marks on the floor was described as problematic for creating a good first impression, as was the smell and marks on clothing in axillary hyperhidrosis. "I very often think more about others perception than how I would look. Therefore, I try to hide the sweat and smell the ways I can." (Participant #11)

Noticing Others' Ignorance. Participants reported that it was difficult to talk to others about hyperhidrosis both in childhood and as adults. Some who discussed hyperhidrosis with their parents would be told that they were unfit or that the problems would recede as they got older. Others reported that their parents were not able to understand their problem since it was unknown. "I have mentioned it for mom and dad. I am ashamed. It took me 10 years to talk about it since it's sensitive and many people regard it as disgusting. My parents have not understood to which extent it has affected me" (Participant #4)

In situations requiring social activities such as performing a joint task or being in a group, it was difficult to explain when others commented the sweating problems. "In school gymnastics I would sometimes get comments like why are you sweating? We haven't even started yet! It was not the right time or place to explain my problems for others." (Participant #10)

Difficulties in Finding Support. Those who were able to talk about their problem with family and friends and received a positive response reported relief in managing the disease. All participants described a delay of several years between the onset of the symptoms and telling others about the condition. "Why do we not talk about this? Well I think it's a rare condition, No one knows how common it is. I don't know how many people knows that such a disease exists." (Participant #9)

Those who had come into contact with healthcare and received treatment reported that it was much easier to talk about the condition afterward. Once the sweating had ceased, no further thoughts had to be given of the consequence of telling others about the problem. "In my experience during the years that I was treated it became much easier to reveal the condition. When I have had treatment, I did not think about the condition at all." (Participant #2)

Discussion

Hyperhidrosis limits the possibilities and choices of an individual in their daily life from adolescence into adulthood. Thus, the disease has a negative influence on social interactions and affects other long-term aspects of life, such as life-plans and career choices. The theme reported in this study, *to be captured in a filthy body*, describes the experiences of men living with primary hyperhidrosis. The sweating problems trap the individual in routines and thoughts that discourage them from social interactions, leaving little room for spontaneity. Furthermore, the attributes associated with sweating were described as feeling unclean or filthy. These attributes had a negative effect on self-esteem, creating stress and anxiety of being exposed as odd or different from others.

This study also reports that in men there is a delay in communication with others regarding their excessive sweating. Some men reported that when they were able to talk about their symptoms, others were unsympathetic or failed to apprehend the effects that the disease had. While there are no explanations for this phenomenon, it could be explained that society's negative associations with hyperhidrosis may have a historic cause. Manners and etiquettes emerged in the upper social strata and were dispersed down to the daily life of the common man. In this process of self-control of the body's social and private realm, rules emerged of what was and was not acceptable

(Elias, 1994). Regarding bodily fluids, specific self-care and self-regulation routines were established from childhood for one to become a part of the civil society. Body fluids were considered as waste that had to be removed and suppressed (More & Casper, 2015). Considering these constructs to achieve social acceptance, it may be understandable that when sweating is not being controlled, as in primary hyperhidrosis, there could be a clash with the norms of social interactions. In general, a society that tends to stereotype sweaty individuals as nervous or unclean, men with hyperhidrosis may not help-seek for the condition due to perceived stigma.

Stigma has been described as a process in which social meaning is attached to a group of individuals and their behaviors (Goffman, 1963). According to Goffman (1963), this process has six dimensions: concealability, disruptiveness, course of the condition, esthetic qualities, origin of the condition, and peril, all of which are found in men with primary hyperhidrosis.

Experiences of stigma differ depending on the medical condition. In hyperhidrosis, feedback from others stigmatizes and discredits men, which leads to withdrawal or covering in an exposed situation. Covering, such as choosing appropriate attire to camouflage the symptoms, was an example given by the men for managing the stigma and attempting to pass as normal in a group. Disclosing the problem without receiving a positive response can further stigmatize and discredit those who speak with their close ones but fail to gain the support they sought. Stigma also deprives individuals of their basic needs, shaming and marginalizing them, resulting in negative outcomes on mental health. Stigma has also been described as a possible cause for delaying the contact between an ill individual and healthcare (Hilbert et al., 1985; Shrivastava et al., 2012).

Although only men were interviewed in this study, it would be reasonable to assume that women with hyperhidrosis also experience stigma. Stigma alone cannot therefore explain the reluctance of men to seek healthcare due to primary hyperhidrosis and the increased delay in seeking care relative to women. A possible reason for this difference could be that young women are responded to differently by family and society when they disclose their sweating problem. This would mean that society has a different reference of what is acceptable for men and women. No other study has investigated this and further research regarding women with hyperhidrosis could provide valuable information on this matter.

Strengths and Limitations

Content analysis itself is subject to interpretation. Perception bias can be an issue since two different persons could study the same thing but interpret it

differently. Each person's perception is influenced by its own surrounding, background, and the context in which an observation takes place. One way to reduce perception bias is by discussing the observations and how we interpret them. Expertise about hyperhidrosis and having different genders among the authors helped in this matter. Still, the findings presented must be regarded within the context in which they have been observed and interpreted.

Access to individuals who provided us with rich descriptions of their condition and their experience of living with primary hyperhidrosis was crucial. A limitation could have been that individuals with mild hyperhidrosis were not asked for participation. Those suffering from mild hyperhidrosis are usually recommended over-the-counter treatments and are seldom seen within the healthcare system. However, while the extent of problems contributed by excessive sweating could vary, the nature of it should be the same for those with severe or mild hyperhidrosis.

Conclusions

This study explored the meaning of living with primary hyperhidrosis in men as feeling filthy while they struggle to control or hide the excessive sweating. Insufficient understanding from others and being reminded from the sweating is stressful and results in a sense of captivity. Primary hyperhidrosis could stigmatize the individual, which has a negative effect on mental health and the will to seek help. It is not known if women are treated differently by family or society with regard to disclosure. Further research in women could reveal and possibly explain the disparity that exists between genders with regard to their healthcare-seeking behavior.

Recommendations and Implications

Studies about primary have been mainly focused on diagnosis and how to treat the condition. Since very little is known about living with primary hyperhidrosis, there has been a gap in knowledge regarding its difficulties and consequences. By increasing the awareness on how primary hyperhidrosis affects men, healthcare practitioners should be careful not to stigmatize but rather listen and enable men to disclose their symptoms and descriptions of living with extreme sweating. This holistic approach toward men with hyperhidrosis could result in more cases being detected and more men getting the help they need.

Primary hyperhidrosis starts in adolescence which could make it difficult for the individual to distinguish normal from excessive sweating. At this stage, information about the disease in school or in conjunction with leisure activities could facilitate and help those affected

to seek help. The information should not only target those suffering from the sweating problems but also make their proximity aware that primary hyperhidrosis exists. Education of healthcare professionals, especially general practitioners and students qualifying as physicians or nurses about hyperhidrosis, would also improve the care that can be provided.

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ORCID iD

Alexander Shayesteh  <https://orcid.org/0000-0003-0700-7195>

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