

Measuring Iranian women's sexual behaviors: Expert opinion

Zohreh Ghorashi, Effat Merghati-Khoei¹, Alireza Yousefy²

Department of Reproductive Health, School of Nursing and Midwifery, ²Medical Education Research Center, Isfahan University of Medical Sciences, Isfahan, ¹Brain and Spinal Injury Repair Research Centre (BASIR), Tehran University of Medical Sciences, Tehran, Iran

ABSTRACT

The cultural compatibility of sexually related instruments is problematic because the contexts from which the concepts and meanings were extracted may be significantly different from related contexts in a different society. This paper describes the instruments that have been used to assess sexual behaviors, primarily in Western contexts. Then, based on the instruments' working definition of 'sexual behavior' and their theoretical frameworks, we will (1) discuss the applicability or cultural compatibility of existing instruments targeting women's sexual behaviors within an Iranian context, and (2) suggest criteria for sexually related tools applicable in Iranian settings. Iranian women's sexual scripts may compromise the existing instruments' compatibility. Suggested criteria are as follows: understanding, language of sexuality, ethics and morality. Therefore, developing a culturally comprehensive measure that can adequately examine Iranian women's sexual behaviors is needed.

Key words: Iranian women, measure, sexual behavior

INTRODUCTION

In order to assess sexual well-being and provide treatment or education for Iranian women's sexuality, it is necessary to understand their sexuality and the meanings they give to sexual behaviors. We therefore sought a tool appropriate to measure their sexual behaviors. 'Sexual behavior' is a complex concept that is difficult to measure. According to Webster's online dictionary,^[1] 'behavior' means 'the manner of conducting oneself' and 'sexual' simply means whatever

relates to 'sex', 'the sexes' or 'sexual reproduction'. Thus, sexual behavior would be an act by someone that expresses their sexuality. In the *Archive for Sexology*, Erwin J. Haeberle^[2] introduces 'sexual' as a word with double meaning, referring to "human anatomy as well as to human behavior". He defines 'sexual behavior' as erotic behavior. Therefore, in contrast with Webster, the *Critical Dictionary in the Archive for Sexology* defines human reproduction as "asexual behavior" because it concentrates on "the biological facts without reference to the erotic feelings of the man and the woman involved".^[2]

The functional analysis of sexual behaviors has led researchers to develop instruments to gather observable data. In order to change subjective meanings to observable data, the researchers need to extract meanings from the contexts and populations they seek to measure. Many sexually related measures and instruments have been published; they measure perceptions, attitudes, beliefs and so on. However, the contexts from which the concepts and meanings were extracted to develop these instruments vary. Doubtless, their reliability in measuring sexual behaviors as socially constructed, complex and dynamic phenomena can be questioned. In order to determine a research approach for the

Address for correspondence: Dr. Effat Merghati-Khoei, Brain and Spinal Injury Repair Research Centre (BASIR), Tehran University of Medical Sciences, Tehran, Iran. E-mail: effat_mer@yahoo.com

Access this article online

Quick Response Code:



Website:
www.jehp.net

DOI:
10.4103/2277-9531.139245

Copyright: © 2014 Ghorashi Z. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

This article may be cited as: Ghorashi Z, Merghati-Khoei E, Yousefy A. Measuring Iranian women's sexual behaviors: Expert opinion. *J Edu Health Promot* 2014;3:80.

context of Iranian women's sexuality, review and assessment of existing instruments was essential.

After a brief overview of the existing instruments measuring "non-risky" sexual behaviors among heterosexual women, we look at their cultural appropriateness to measure sexual behaviors within an Iranian context. Finally, because we find these instruments insufficient, we suggest criteria for cultural-specific sexually related measures in the Iranian settings.

MATERIALS AND METHODS

For the purpose of this paper, we searched literature using Medline, Pub-Med, PsychInfo and CINAHL from June 2006 to June 2011. A variety of mesh terms were used to access the sexually related measures. The mesh terms used to search title and abstract included "sexuality", "sexual behavior", "questionnaire" and "sexual behavior AND questionnaire" or "sexually related measure", "sexually related tools" limited to "human, female, English AND reproductive age".

Focused exclusively on the concept of sexual behavior, we screened titles and abstracts. Considering that not all abstracts highlighted the specified population and name of the applied tools, these articles were found in full, and methods sections were reviewed to identify populations and the tools used. Retrieved articles were included if they used a structured instrument(s) to measure sexual behaviors of the female population. We excluded those studies whose outcome of interest included risky sexual behaviors or sexual behaviors measured among same sex relationships. We excluded same sex relationships because this form of relationships is illegal and deniable in Iran. We searched for the original articles which introduced the instrument. If the original paper was unavailable, we selected the article that used the given tool to measure the study outcomes. In this stage, tools in languages other than English, those employed just for menopausal women and those not related to sexual behaviors were excluded. Using Gagnon and Simon sexual script theory^[3] as the theoretical framework, cultural appropriateness (i.e. understanding and language of sexuality, ethics, and morality) was our selection criteria for the instruments. This decisive factor was proved by three experts. All questions in a given tool were qualitatively assessed by two researchers.

RESULTS

Evaluation of the 143 articles revealed that a majority of them (65%) had utilized the Female Sexual Function Index (FSFI) in their research.^[4] The second most used scale was the Pelvic Organ Prolapsed/Urinary Incontinence Sexual Function Questionnaire (PISQ-12), utilized in 10.4% of the final articles. The Golombok-Rust Inventory of Sexual Satisfaction (GRISS) and the Arizona Sexual Experience Scale (ASEX) were the next most used instruments by 6.9% and 5.6% of articles, respectively. We reviewed all instruments and determined the subscales as well as measurement

types [Table 1]. We categorized these instruments into three groups based on their working definitions of 'sexual behavior' and theoretical frameworks. These instruments were reviewed by the authors, who are Iranian experts in sexology, reproductive health, and epidemiology. Of 50 instruments, we found 19 tools applicable in the Iranian culture [Table 2]. For Iranian settings, 10 instruments were found culturally problematic [Table 3]. The third group included those which were focused on a specific sexual problem rather than looking at sexual behaviors overall [Table 4]. The multidimensional Derogatis Sexual Functioning Inventory (DSFI)^[53] did not fit into any of those three categories. With this overview, it appears that there are significant challenges to using these instruments in Iranian contexts.

DISCUSSION

Inspiring Gagnon and Simon's description of sexual behaviors defined with 'social scripts',^[2] understanding and language of sexuality, ethics, and morality are the main cultural determinants of sexual norms in the Iranian society.

Understanding and language of sexuality

In her linguistic analysis of sexuality expression of Iranian women, Merghati-Khoei^[54] has revealed the ways of developing terminology and cultural explanations, which are juxtaposed with the exploration of the development of women's sexuality. Iranian women expressed their sexuality differently from Western women even though they understood and talked about the same issues. Iranian women frankly speak about all the physical aspects of sexuality. These conversations include open teasing about the physical side of sexuality. There is, however, a hesitation when it comes to discussing or reporting the emotional aspects of sexual encounters.^[55] The power of culture in dictating daily language for females has been highlighted in Morocco^[56] as an Arab-Islamic context. Similarly, culturally meaningful ambiguity in language guides Iranian people's behavior.^[57] Even though Persian vocabulary, concepts and expressions about sexual matters exist in art, poetry and the beauty of nature, these linguistic resources are not applied in daily life to express sexuality. Thus, expressing sexuality in day-to-day conversation is limited. Therefore, employing instruments which use sexually explicit items is insufficient. For example, the Sexual Attitude Scale (SAS),^[30] certainly a well-designed tool for use within many cultures measures a person's awareness toward her/his sexual interests and needs as well as sexual-self judgment. Communication of sexual needs or interests with others is another feature of this tool. As a neglected subject matter in the Iranian culture, questioning people about their sexual needs and interests or sexual-self concept seems impractical. Sexuality is an unspoken issue, and individuals might not be linguistically skilled to communicate their sexuality with an interviewer.

In sum, the art of using a rich vocabulary of metaphors and euphemisms is a characteristic of Iranian speech, used to communicate and encapsulate matters not normally spoken explicitly. For example, for fluent English speakers phrase

Table 1: Instruments features including the subscales

Scale	Items	Subscale 1	Subscale 2	Subscale 3	Subscale 4	Subscale 5	Measurement
Arizona sexual experience scale (ASEX)	6	Drive	Arousal	Vaginal lubrication	Ability to reach orgasm	Satisfaction from orgasm	5 items Likert
Body exposure during sexual activity questionnaire (BESAQ)	28	Worry and self-consciousness	Comfort with body exposure				5 items Likert
Brief index of sexual functioning for women (BISF-W)	22	Thoughts/ desires	Arousal	Frequency of sexual activity	Receptivity/ initiation	Pleasure/ orgasm	5 items Likert
Continued (BISF-W)		Relationship satisfaction	Problems affecting sexual satisfaction				
Changes in sexual functioning questionnaire (CSFQ)	35	Sexual desire frequency	Sexual desire/ interest	Sexual pleasure	Sexual arousal	Orgasm	5 items Likert
Cues for sexual desire scale (CSDS)	20	Emotional bonding	Erotic/explicit cues	Visual/ proximity cues	Implicit/ romantic cues		5 items Likert
Decreased sexual desire screener (DSDS)	5	One dimensional					Yes/no
Derogatis interview for sexual functioning (DISF-SR)	25	Sexual cognition and fantasy	Sexual arousal	Sexual behavior and experience	Orgasm	Sexual drive and relationship	9 Likert: first 3 domains 5 Likert: fourth domain 5 & 9 Likert: fifth domain
Derogatis sexual functioning inventory (DSFI)	254	Information	Experiences	Derive	Attitudes	Psychological symptoms	Yes/no Multiple point Likert scale
Continued (DSFI)		Affects	Gender role definition	Fantasy	Body image	Sexual satisfaction	
Duncan female sexuality questionnaire	64	Quality of relationship	Desire/ aversion	Arousal/ lubrication	Orgasm	Physical pain	Selective 5 or 6 item questions
Continued Duncan female sexuality questionnaire		Activity/ frequency	Satisfaction				
Experiences in close relationship scale (ECR)	12	Attachment anxiety	Attachment Avoidance				7 Likert
Fear of intimacy scale	35	Uni-dimensional scale					5 Likert
Female sexual distress scale (FSDS)	12	Uni-dimensional scale					5 Likert
Female sexual encounter profile (FSEP)	7	Uni-dimensional scale					
Female sexual function index (FSFI)	19	Desire/arousal	Lubrication	Orgasm	Satisfaction	Pain	5 Likert
Female sexual well-being scale (FSWB)	17	Interpersonal domain	Cognitive emotional domain	Physical arousal domain	Orgasm satisfaction domain		
Global measure of sexual satisfaction (GMSEX)	5	Uni-dimensional scale					7 Likert
Golombok-Rust inventory of sexual satisfaction (GRISS)	28	Anorgasmia	Vaginismus	Avoidance	Non sensuality	Dissatisfaction	
Continued (GRISS)		Frequency of sexual contact	Non communication				

Contd...

Table 1: Contd...

Scale	Items	Subscale 1	Subscale 2	Subscale 3	Subscale 4	Subscale 5	Measurement
Index of sexual satisfaction (ISS)	25	One dimensional scale					7 Likert
McCoy female sexuality questionnaire	19	Sexual interest	Satisfaction with sexual activity	Vaginal lubrication	Frequency	Sex partner	7 Likert: 18 items Frequency: 1 item
McCoy female sexuality questionnaire		Orgasm					
New sexual satisfaction scale (NSSS)	20	Ego focused	Sexual activity centered				5 Likert
Pelvic organ prolapsed/ urinary incontinence sexual function (PISQ-12)	12	Behavioral/ Emotive factor	Physical factor	Partner-related factor			5 Likert
Questionnaire of cognitive schema activation in sexual context	28	Undesirability/ rejection	Incompetence	Self-depreciation	Difference/ loneliness	Helpless	5 Likert
Relation and sexuality scale (RSS)	19	Sexual function	Sexual frequency	Sexual fear			5 & 4 Likert
Sexual activity questionnaire		Discomfort from sexual intercourse	Pleasure from sexual intercourse	Habit			
Sexual adjustment scale (SAQ)		Desire	Relationship	Activity level	Arousal	Orgasm	5 & 6 & 7 Likert
Continued (SAQ)		Techniques	Satisfaction				
Sexual attitude scale (SAS)	43	Permissiveness	Sexual practices	Communion in relationship	Instrumentality		7 Likert
Sexual awareness scale (SAS)	36	Sexual consciousness	Sexual monitoring	Sexual assertiveness	Sex appeal consciousness		5 Likert
Sexual compulsivity scale	10	Sexually compulsive behavior	Sexual preoccupation	Sexually intrusive thoughts			4 Likert
Sexual confidence scale	6	One dimensional scale					6 Likert
Sexual consent scale-revised (SCS-R)	36	Lack of perceived behavioral control	Positive attitude toward establishing consent	Indirect consent behavior	Sexual consent norms	Awareness of consent	7 Likert
Sexual deception scale		Blatant lying	Self serving	Avoiding confrontation			
Sexual desire inventory	14	Dyadic sexual desire	Solitary sexual desire				7 Likert 8 visual
Sexual dysfunction beliefs questionnaire (SDBQ)	40	Sexual conservation	Sexual desire and pleasure as a sin	Age-related beliefs	Body image beliefs	Affection primacy	5 Likert
Continued (SDBQ)		Motherhood primacy					
Sexual excitation/sexual inhibition scale (SES)	20	Social interaction	Visual stimuli	Fantasizing about sex	Non-specific stimuli		4 Likert
(SIS) 1	14	Losing arousal easily	Partner concerns	Performance concerns			4 Likert
SIS) 2	11	Risk of being caught	Negative consequences	Pain/Norms and values			4 Likert
Sexual excitement/sexual inhibition inventory for women and men (SESII/ W/M)	30	Inhibitory cognitions	Relationship importance	Arousability	Partner characteristic and behavior	Setting	4 Likert

Contd...

Table 1: Contd...

Scale	Items	Subscale 1	Subscale 2	Subscale 3	Subscale 4	Subscale 5	Measurement
Continued (SESII/W/M)		Dyadic elements of the sexual interaction					
Sexual function questionnaire	26	Desire	Arousal sensation	Arousal lubrication	Orgasm	Enjoyment	5 Likert
Continued sexual function questionnaire		Pain	Partner relationship				
Sexual interest and desire inventory-female (DIDI-F)	13+module5	One-dimensional questionnaire					Somehow complex
Sexual motivation scale	21	Intimacy	Enhancement	Copying			
Sexual mode questionnaire	99	Automatic thoughts	Emotional response	Sexual response			Subscale 1: 5 Likert Subscale 2: selection Subscale 3: 5 Likert
Sexual relationship index (SRI)	27	One-dimensional questionnaire					5 Likert
Sexual relationship scale	8	Barriers in sexual relationship	Overall sexual relationship				6 Likert
Sexuality scale (SS)	30	Sexual esteem	Sexual depression	Sexual preoccupation			5 Likert
Sexual satisfaction and distress scale for women (SSS-W)		Communication	Compatibility	Contentment	Relational concern	Personal concern	
Sexual self consciousness scale	12	Sexual embarrassment	Sexual self focus				5 Likert
Sexual self schema scale (SSSS)	50	Passionate-romantic	Open-direct	Embarrassed-conservative			7 Likert
Sexual sensation seeking scale	11	Trill and adventure seeking	Experience seeking	Disinhibition	Boredom susceptibility		
Sociosexual orientation-inventory (SOI)	9	One-dimensional questionnaire					9 Likert
Subjective sexual well-being (SSWB)		Subjective sexual well-being	Sexual practice	Sexual attitude			3-5 Likert
WHO Qol-100	4	Sexual satisfaction					5 Likert
Why human have sex? (YSEX?)	142	Physical reasons	Goal attainment reasons	Emotional reasons	Insecurity reasons		5 Likert

WHO = World Health Organisation, SES = Sexual excitation scale, SIS = sexual inhibition scale

'marital life' may indicate all kinds of relationships within a marital framework, while in Farsi *zendegi-e-zanashoyi* (literally marital life) has sexual connotations and is usually understood to mean the sexual relationship between husband and wife.

Another difficulty in asking about sexuality during a study is the struggle between conscious embarrassment and sexual talk. By conscious embarrassment, we mean the shame, prohibition and modesty about sex. They are part of Iranian women's sexual script. The majority of the women who participated in Merghati-Khoei's qualitative study pointed out that they were not culturally expected to be straightforward or frank in expressing sexual matters.^[54] For example, the Sexual Desire Inventory^[26] tends to measure

sexual desire as a biologic factor. Out of 14 items, 4 focus on masturbation and 2 items ask about having interest in casual sex. In Iranian contexts, none of these 6 items would be posed by researchers or responded to by the participants. Why human have sex? (YSEX) is another example, which measures number of variables. For instance, some of the items focus on motivations leading people to out-of-wedlock or casual sex. Although casual or extra marital sex happens in every society, questioning Iranians about these behaviors is not ethically and religiously possible or feasible. This assertion is based on the common assumptions. In Iran, people strongly hold onto the traditional culture of sexuality based on 'purity' (*paki*), 'chastity' (*nejabat*), 'honour' (*aberoo*) and 'honesty' (*sedagat*) underlying the family structure.

Table 2: Compatible scales for Iranian culture

Scale	Reference
WHO QoI-100	(WHO, 1993) ^[6]
Subjective sexual well-being (SSWB)	(Laumann <i>et al.</i> , 2006) ^[6]
Sexuality scale (SS)	(Snell & Papini, 1989) ^[7]
Sexual relationship index (SRI)	(Haning, 2005) ^[8]
Sexual self schema scale (SSSS)	(Andersen & Cyranowski, 1994) ^[9]
Sexual relationship scale	(Hughes & Snell, 1990) ^[10]
Sexual interest and desire inventory-female (DIDI-F)	(Clayton <i>et al.</i> , 2006) ^[11]
Sexual function questionnaire	(Quirk <i>et al.</i> , 2002) ^[12]
Sexual confidence scale	(Abraham <i>et al.</i> , 2009) ^[13]
New sexual satisfaction scale (NSSS)	(Stulhofer, Busko, & Brouillard, 2010) ^[14]
Mccoy female sexuality questionnaire	(McCoy & Davidson, 1985) ^[15]
Index of sexual satisfaction (ISS)	(Hudson, Harrison, & Crosscup, 1981) ^[16]
Female sexual well-being scale (FSWB)	(R. C. Rosen <i>et al.</i> , 2009) ^[17]
Female sexual function index (FSFI)	(R. Rosen <i>et al.</i> , 2000) ^[4]
Derogatis interview for sexual functioning (DISF-SR)	(L. R. Derogatis, 1997) ^[18]
Global measure of sexual satisfaction (GMSEX)	(Lawrance & Byers, 1995) ^[19]
Arizona sexual experience scale (ASEX)	(McGahuey <i>et al.</i> , 2006) ^[20]
Sexual dysfunctional beliefs questionnaire (SDBQ)	(P. J. Nobre, Gouveia, & Gomes, 2003) ^[21]
Brief index of sexual functioning for women (BISF-W)	(Mazer, Leiblum, & Rosen, 2000) ^[22]

WHO = World Health Organisation

There is also the belief commonly permeating Iranian society that people are fairly innocent in terms of sexuality compared with non-Muslim or Western societies.^[54] However, with these assumptions we cannot minimize the impact of factors such as modernization, worldwide communication and cultural transformations in younger generations and the way they learn about sex, practice and develop their sexual understandings. Undoubtedly, these factors change behaviors and attitudes.

Social conduct and religiosity define the ethical aspect of sexuality in the Iranian culture. In Iran the teachings of Islamic principles tie strongly to Shi'a interpretations, which form the basis for Iranians' understandings of sexuality.^[55] The expression of sexuality is considered legitimate only within the framework of Islamic marriage (Nikah). Moreover, as shown in Merghati *et al.* study, sexual obedience was seen as the primary goals of the committed Muslim woman. The concept of Nejabat (modesty) is the most important ethical code applied to an Iranian woman who is not sexually expressive. In contrast, Islamic scholar Morteza Motahari pointed out the Islamic clear guidelines toward sexuality, "leading neither

to any sense of sexual deprivation and frustration, nor to any repressed or inhibited sexual desire".^[58]

However, in the Islamic doctrine 'freeing sexual desire and lifting of traditional moral restraints' is not accepted.^[58] As a criterion, religiosity has significant effects on Iranian women's sexual understandings; and that experts working in the fields of gender and sexuality need to be sensitive to the notion that some Muslim women may not speak out their sexuality as an indicator of submission to religious codes, of modesty and of being an idealized Muslim wife.^[55]

CONCLUSION

To investigate sexual behaviors in an Iranian context, we recognize the importance of identifying or developing an instrument to assess sexual behavior domains among women in the particular context of Iranian culture. We thought that such an instrument would be essential tool for achieving a more systematic and in-depth understanding of Iranian women's sexuality, may be useful in applied settings, and would advance sexuality research as a whole. No matter the context or use, however, measuring a construct such as sexual behavior is subjective and therefore entirely dependent on self-report. It has been argued that Iranian women may not report properly if they believe sexuality has nothing to do with health.^[55] For example, a woman's inability to gain sexual pleasure due to painful intercourse might not be defined as a sexual health problem to be reported, whereas other people would consider it as a sexual health problem for the woman. This suggests the idea that the culture of sexuality affects people's interpretations of sexually related problems.

Developing a contextualized instrument to measure the domains of sexual behavior would allow sexuality and gender researchers to better answer questions related to the influence of culture in those domains, sexual scripts across diverse cultures, and other factors influencing sexual health outcomes.

In the 1970s, Gagnon and Simon's *Sexual Conduct* represented the first truly sociological analysis of sexual behavior.^[2] Gagnon and Simon defined 'sexual behavior' within a new theoretical framework of 'social scripts'. They produced a critique that moved us beyond the objective definition of sexual behavior:

Our concern here is to understand sexual activities of all kinds ... as the outcome of a complex psychological process of development, and it is only because they are embedded in social scripts that the physical acts themselves become possible ... it is neither fixed by nature or by the organs themselves. The very experience of sexual excitement that seems to originate from hidden internal sources is in fact a learned process and it is only our insistence on the myth of naturalness that hides these social components from us.^[3]

The 'script' metaphor emphasizes that sexual behaviors originate from socially determined norms of sexuality. Individuals acquire their sexual 'character' through a

Table 3: Instruments incompatible with Iranian culture

Scale	Reference	Challenges
Why human have sex? (YSEX?)	(C. M. Meston & Buss, 2007 Aug) ^[23]	Focusing on motivations leading people to out-of-wedlock or casual sex Out-of-wedlock or casual sex as the punishable encounters in Iran Not possible or feasible to questioning Iranians about these behaviors
Socio-sexual orientation-inventory (SOI)	(Simpson & Gangestad, 1991) ^[24]	Attitude toward casual sex: From restricted to unrestricted Casual sex as an intolerable behavior in the Iranian culture Casual sex posed by researchers Impossible to ask people about their feelings toward casual sex
Sexual inhibition/sexual excitement scale	(Carpenter, Janssen, Graham, Vorst, & Wicherts, 2008) ^[25]	These are two innate and acquired traits which define sexual responses Balance between these two traits contracts the natural sexual responses These two traits embedded in one's culture SIS/SES cannot be used in the traditional and controversial societies
Sexual desire inventory	(Spector, <i>et al.</i> , 1996) ^[26]	Out of 14 items, 4 focus on masturbation and 2 items ask about having interest in casual sex None of these 6 items posed or responded to in the Iranian contexts
Sexual deception scale	(Marellich, Lundquist, Painter, & Mechanic, 2008) ^[27]	To measure dishonesty and deceptive behaviors toward sexual relationship with current or prospective partner In Iranian context, assumedly sexual relationship is negotiated only within marriage Sexuality as an unspoken subject matter before marriage
Sexual consent scale-revised (SCS-R)	(Humphreys & Brousseau, 2010) ^[28]	Differentiating sexual consent or refusal Both sexual consent or refusal as culturally defined As a private issue, the ways Iranian couples negotiate their sexual encounters and the process of consent are unknown and sexual life keeps its secrecy
Sexual awareness scale (SAS)	(Snell, Fisher, & Miller, 1991) ^[29]	Sexual awareness as a neglected subject matter in the Iranian culture Difficulty in questioning people about their sexual needs and interests or sexual communication Less skilled women to verbalize the sexually related topics
Sexual attitude scale (SAS)	(Hendrick & Hendrick, 1987) ^[30]	Attitude is absolutely culture base Some issues mentioned are not addressed in Iranian society
Cues for sexual desire scale (CSDS)	(McCall & Meston, 2006) ^[31]	Measuring the stimulants and variables manipulating sexual desire Eroticism and sexual stimulants are not universal phenomena and can be influenced by cultural diversity Has not taken into account cultural diversity This tool includes questions undesirable for the Iranian culture
Sexual motivation scale	(Cooper, Shapiro, & Powers, 1998) ^[32]	Different motives for achieving various goals Having sex to serve different needs Iranian women's motivations toward either appetite or aversive behaviors are solely defined within marriage and different from the population in which SMS was developed and validated

'cultural scenario' in which they take up, internalize and enact culturally prescribed normative roles; 'interpersonal scripts' in which they make a suitable identity based on desired expectations and 'intrapsychic scripting' in which they make 'the self' in relation to social life.^[59] Thus, sexual practice is separated from the biology of the body and one's sexuality is strongly formed by the very complex social world. Sexuality has been regarded as the product of societies and histories.^[2,60-62] Having investigated the history of human sexuality, we believe sexuality is influenced by the society, culture and era in which people live.

Within an Iranian context, we therefore recognized existing instruments targeting "non-risky" sexual behaviors among heterosexual women are insufficient to measure sexual

behaviors. We categorized instruments as culturally compatible or incompatible based on the sexuality domains they tend to measure. The instruments, by which the biological aspects of sexual behaviors are measured were found applicable for any given community or population, the Iranian context included. Alternatively, those measuring outcomes related to subjects' attitudes, understanding or sexual scripts' were identified as culturally incompatible.

Most of the tools seem reasonable candidates for use in the Iranian culture and society with minor revisions [Table 1]. Review of these instruments shows that most of them are functional based, such as the most used scale in literature, (FSFI). Other well known tools, such as the Arizona Sexual Experience Scale (ASEX) and the Golombok-Rust

Table 4: Problem-focused instruments

Scale	Reference
Sexual self consciousness scale	(van Lankveld, Geijen, & Sykora, 2008) ^[33]
Sexual satisfaction and distress scale for women (SSS-W)	(C. Meston & Trapnell, 2005) ^[34]
Sexual mode questionnaire	(P.J. Nobre & Pinto-Gouveia, 2003) ^[35]
Sexual excitation/sexual inhibition inventory for women and men (SESII/W/M)	(Milhausen, Graham, Sanders, Yarber, & Maitland, 2010) ^[36]
Sexual compulsivity scale	(Kalichman & Rompa, 1995) ^[37]
Female sexual distress scale (FSDS)	(L. Derogatis, Rosen, Leiblum, Burnett, & Heiman, 2002) ^[38]
Fear of intimacy scale	(Descutner & Thelen, 1991) ^[39]
Experiences in close relationship scale (ECR)	(Wei, Russell, Mallinckrodt, & Vogel, 2007) ^[40]
Duncan female sexuality questionnaire	(Duncan <i>et al.</i> , 2001 feb) ^[41]
Decreased sexual desire screener (DSDS)	(Clayton <i>et al.</i> , 2009) ^[42]
Changes in sexual functioning questionnaire (CSFQ)	(Clayton, McGarvey, & Clavet, 1997) ^[43]
Body exposure during sexual activity questionnaire (BESAQ)	(Cash, 2004) ^[44]
Pelvic organ prolapsed/urinary incontinence sexual function (PISQ-12)	(Rogers, Coates, Kammerer-Doak, Khalsa, & Qualls, 2003) ^[45]
Sexual adjustment scale (SAQ)	(Waterhouse & Metcalf, 1986) ^[46]
Sexual activity questionnaire	(Thirlaway, Fallowfield, & Cuzick, 1996) ^[47]
Relation and sexuality scale (RSS)	(Berglund, nystedt, bolund, sjoden, & rutquist, 2001) ^[48]
Questionnaire of cognitive schema activation in sexual context	(P. J. Nobre & Pinto-Gouveia, 2009) ^[49]
Female sexual encounter profile (FSEP)	(Ferguson, 2002) ^[50]
Golombok-Rust inventory of sexual satisfaction (GRISS)	(Rust & Golombok, 1985) ^[51]
Sexual Sensation Seeking Scale	(Kalichman <i>et al.</i> , 1994) ^[52]

Inventory of Sexual Satisfaction (GRISS), are also functional based. Some other tools are problem-focused [Table 3] and specific to measure only disorder-based outcomes.

We argue that the medically oriented instruments employed in the field are drawn from concepts and meanings based on investigations conducted in Western societies. These very well-structured tools are constantly applied to the clients. Yet as researchers, we sometimes found ourselves disappointed by the level of difficulty, which we professionals encountered in fitting our participants into those biomedical frameworks. These instruments may not project the understandings of those who participate in our studies.

The culture-bound nature of sexuality limits the research-based information in Iran. In our society, the lack of information in the sexual domain will be most productively addressed

first through research attention to subjective concepts. Lack of sufficient knowledge in the field of sexuality in Iranian contexts, makes it important to identify normative sexual behaviors qualitatively before applying problem-oriented tools in research.

FINAL CONCLUSION

There are social and cultural challenges arising from the recognition that Iranians use culturally specific sexual expressions. These expressions may construct different ways of perceiving sexuality that are not easily translatable or even understandable by outsiders. This means that sexuality is a complex phenomenon embedded in various meanings and understandings, not merely objective and measurable behavior. Explaining those meanings and perceptions makes sexuality a 'dynamic' phenomenon through one's life time. 'How we know what we know' changes periodically and therefore, creating an epistemological crisis in knowledge as well as the research process.^[63,64] However, scholars in science and human behavior such as Skinner^[65] have powerfully questioned the reliability of subjective measures of private events such as sexual behaviors.^[65]

The basic sexuality criteria of Iranian women are relatively argued. We concluded that the published instruments are well-designed and used worldwide; however, we must also acknowledge that the sexual scripts of Iranian women define 'sexual behaviors' differently, limiting their communication in the research setting and compromising the compatibility of these instruments. Therefore, exploring and analyzing the lexicon and expressions used by the Iranian women creates a ground for developing a culturally comprehensive measure, which can adequately examine how these women explain their sexual behaviors.

ACKNOWLEDGMENT

Thanks to the Isfahan University of Medical Sciences, School of Nursing and Midwifery, for funding the research, in research project code 390435. Our special thanks to the authors and scholars who supported our review by responding to our inquiries and providing us with their priceless papers. We would like to sincerely thank Professor Thomas Smith for reviewing the paper and his invaluable input.

REFERENCES

1. Webster M. Availabel from: <http://www.nws.merriam-webster.com> [Last accessed on 2012].
2. Haeberle EJ. Critical Dictionary. 2012. Available from: <http://www2.hu-berlin.de/sexology> [Last accessed on 2012].
3. Gagnon JH, Simon W. Sexual conduct; the social sources of human sexuality. Chicago: Hutchinson of London; 1973.
4. Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, *et al.* The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther* 2000;26:191-208.
5. WHO. The development of the WHO quality of life assesment instrument. Geneva: WHO; 1993.
6. Laumann EO, Paik A, Glasser DB, Kang JH, Wang T, Levinson B,

- et al.* A cross-national study of subjective sexual well-being among older women and men: Findings from the Global Study of Sexual Attitudes and Behaviors. *Arch Sex Behav* 2006;35:145-61.
7. Snell WE, Papini DR. The Sexuality Scale: An instrument to measure sexual-esteem, sexual-depression, and sexual-preoccupation. *J Sex Res* 1989;29:256-63.
 8. Haning RV. Intimacy, orgasm likelihood of both partners, conflict, and partner response predict sexual satisfaction in heterosexual male and female respondents. Masters thesis. Huntington: Marshall University; 2005.
 9. Andersen BL, Cyranowski JM. Women's sexual self-schema. *J Pers Soc Psychol* 1994;67:1079-100.
 10. Hughes T, Snell WE. Communal and exchange approaches to sexual relations. *Ann Sex Res* 1990;3:149-63.
 11. Clayton AH, Seagraves RT, Leiblum S, Basson R, Pyke R, Cotton D, *et al.* Reliability and validity of the Sexual Interest and Desire Inventory-Female (SIDI-F), a scale designed to measure severity of female hypoactive sexual desire disorder. *J Sex Marital Ther* 2006;32:115-35.
 12. Quirk FH, Heiman JR, Rosen RC, Laan E, Smith MD, Boolell M. Development of a sexual function questionnaire for clinical trials of female sexual dysfunction. *J Womens Health Gend Based Med* 2002;11:277-89.
 13. Abraham L, Symonds T, May K, Althof SE, Hallam-Jones R, Rosen RC. Psychometric validation of gender nonspecific sexual confidence and sexual relationship scales in men and women. *J Sex Med* 2009;6:2244-54.
 14. Stulhofer A, Busko V, Brouillard P. Development and bicultural validation of the new sexual satisfaction scale. *J Sex Res* 2010;47:257-68.
 15. McCoy NL, Davidson JM. A longitudinal study of the effects of menopause on sexuality. *Maturitas* 1985;7:203-10.
 16. Hudson WW, Harrison DF, Crosscup PC. The Index of Sexual Satisfaction: A short-form scale to measure sexual discord in dyadic relationships. *J Sex Res* 1981;17:157-74.
 17. Rosen RC, Bachmann GA, Reese JB, Gentner L, Leiblum S, Wajszczuk C, *et al.* Female sexual well-being scale (FSWB scale): Development and psychometric validation in sexually functional women. *J Sex Med* 2009;6:1297-305.
 18. Derogatis LR. The Derogatis Interview for Sexual Functioning (DISF/DISF-SR): An introductory report. *J Sex Marital Ther* 1997;23:291-304.
 19. Lawrence K, Byers E. Sexual satisfaction in long term heterosexual relationship: Interpersonal exchange model of sexual satisfaction. *Pers Relatsh* 1995;2:267-85.
 20. McGahuey CA, Gelenberg AJ, Laukes CA, Moreno FA, Delgado PL, McKnight KM, *et al.* The Arizona Sexual Experience Scale (ASEX): Reliability and validity. *J Sex Marital Ther* 2006;26:25-40.
 21. Nobre PJ, Gouveia JP, Gomes FA. Sexual dysfunctional beliefs questionnaire: An instrument to assess sexual dysfunctional beliefs as vulnerability factors to sexual problems. *Sex Relation Ther* 2003;18:171-204.
 22. Mazer NA, Leiblum SR, Rosen RC. The brief index of sexual functioning for women (BISF-W): A new scoring algorithm and comparison of normative and surgically menopausal populations. *Menopause* 2000;7:350-63.
 23. Meston CM, Buss DM. Why humans have sex. *Arch Sex Behav* 2007;36:477-507.
 24. Simpson JA, Gangestad SW. Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *J Pers Soc Psychol* 1991;60:870-83.
 25. Carpenter D, Janssen E, Graham C, Vorst H, Wicherts J. Women's scores on the sexual inhibition/sexual excitation scales (SIS/SES): Gender similarities and differences. *J Sex Res* 2008;45:36-48.
 26. Spector IP, Carey MP, Steinberg L. The sexual desire inventory: Development, factor structure, and evidence of reliability. *J Sex Marital Ther* 1996;22:175-90.
 27. Marelich WD, Lundquist J, Painter K, Mechanic MB. Sexual deception as a social-exchange process: Development of a behavior-based sexual deception scale. *J Sex Res* 2008;45:27-35.
 28. Humphreys TP, Brousseau MM. The sexual consent scale-revised: Development, reliability, and preliminary validity. *J Sex Res* 2010;47:420-8.
 29. Snell WE, Fisher TD, Miller RS. Development of the sexual awareness questionnaire: Components, reliability, and validity. *Ann Sex Res* 1991;4:65-92.
 30. Hendrick S, Hendrick C. Multidimensionality of sexual attitudes. *J Sex Res* 1987;23:502-26.
 31. McCall K, Meston C. Cues resulting in desire for sexual activity in women. *J Sex Med* 2006;3:838-52.
 32. Cooper ML, Shapiro CM, Powers AM. Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. *J Pers Soc Psychol* 1998;75:1528-58.
 33. van Lankveld JJ, Geijen WE, Sykora H. The sexual self-consciousness scale: Psychometric properties. *Arch Sex Behav* 2008;37:925-33.
 34. Meston C, Trapnell, P. Development and validation of a five-factor sexual satisfaction and distress scale for women: The Sexual Satisfaction Scale for Women (SSS-W). *J Sex Med* 2005;2:66-81.
 35. Nobre PJ, Pinto-Gouveia J. Sexual modes questionnaire: Measure to assess the interaction among cognitions, emotions, and sexual response. *J Sex Res* 2003;40:368-82.
 36. Milhausen RR, Graham CA, Sanders SA, Yarber WL, Maitland SB. Validation of the sexual excitation/sexual inhibition inventory for women and men. *Arch Sex Behav* 2010;39:1091-104.
 37. Kalichman SC, Rompa D. Sexual sensation seeking and Sexual Compulsivity Scales: Reliability, validity, and predicting HIV risk behavior. *J Pers Assess* 1995;65:586-601.
 38. Derogatis LR, Rosen R, Leiblum S, Burnett A, Heiman J. The Female Sexual Distress Scale (FSDS): Initial validation of a standardized scale for assessment of sexually related personal distress in women. *J Sex Marital Ther* 2002;28:317-30.
 39. Descutner CJ, Thelen MH. Development and validation of a fear-of-intimacy scale. *J Consult Clin Psychol* 1991;3:218-25.
 40. Wei M, Russell DW, Mallinckrodt B, Vogel DL. The Experiences in Close Relationship Scale (ECR)-short form: Reliability, validity, and factor structure. *J Pers Assess* 2007;88:187-204.
 41. Duncan LE, Lewis C, Smith CE, Jenkins P, Nichols M, Pearson TA. Sex, drugs, and hypertension: A methodological approach for studying a sensitive subject. *Int J Impot Res* 2001;13:31-40.
 42. Clayton AH, Goldfischer ER, Goldstein I, Derogatis L, Lewis-D'Agostino DJ, Pyke R. Validation of the decreased sexual desire screener (DSDS): A brief diagnostic instrument for generalized acquired female hypoactive sexual desire disorder (HSDD). *J Sex Med* 2009;6:730-8.
 43. Clayton AH, McGarvey EL, Clavet GJ. The Changes in Sexual Functioning Questionnaire (CSFQ): Development, reliability, and validity. *Psychopharmacol Bull* 1997;33:731-45.
 44. Cash TF. Body image: Past, present, and future. *Body Image* 2004;1:1-5.
 45. Rogers RG, Coates KW, Kammerer-Doak D, Khalsa S, Qualls C. A short form of the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12). *Int Urogynecol J Pelvic Floor Dysfunct* 2003;14:164-8.
 46. Waterhouse J, Metcalf MC. Development of the Sexual Adjustment Questionnaire. *Oncol Nurs Forum* 1986;13:53-9.
 47. Thirlaway K, Fallowfield L, Cuzick J. The Sexual Activity Questionnaire: A measure of women's sexual functioning. *Qual Life Res* 1996;5:81-90.
 48. Berglund G, Nystedt M, Bolund C, Sjöden PO, Rutquist LE. Effect of endocrine treatment on sexuality in premenopausal breast cancer patients: A prospective randomized study. *J Clin Oncol* 2001;19:2788-96.
 49. Nobre PJ, Pinto-Gouveia, J. Questionnaire of cognitive schema activation in sexual context: A measure to assess cognitive schemas activated in unsuccessful sexual situations. *J Sex Res* 2009;46:425-37.
 50. Ferguson DM. Clinical trial development in female sexual dysfunction. *J Sex Marital Ther* 2002;28:77-83.

51. Rust J, Golombok S. The Golombok-Rust Inventory of Sexual Satisfaction (GRISS). *Br J Clin Psychol* 1985;24:63-4.
52. Kalichman SC, Johnson JR, Adair V, Rompa D, Multhauf K, Kelly JA. Sexual sensation seeking scale: Scale development and predicting AIDS-risk behavior among homosexually active men. *J Pers Assess* 1994;62:385-97.
53. Derogatis LR, Melisaratos N. The DSFI: A multidimensional measure of sexual functioning. *J Sex Marital Ther* 1979;5:244-81.
54. Merghati-khoei E. Language of Love in culture of silence: Sexual understanding of Iranian women and Socio-Cultural determinants. (PhD Qualitative), New South Wales, Sydney. 2005. Merghati-Khoei E, Richters J. Concepts of sexuality and health among Iranian women in Australia. *Aust Fam Physician* 2008;37:190-2.
55. Merghati-Khoei E, Richters J. Concepts of sexuality and health among Iranian women in Australia. *Aust Fam Physician* 2008;37:190-2.
56. Sadigi F. Women and linguistic space in Morocco. *Women Lang* 2003;26:35-45.
57. Haeri S. Law of desire: Temporary marriage in Iran. London: I. B. Tauris; 1989.
58. Mutahhari M. sexual ethics in Islam and in the western world. Translated by khurshid Ali M. Foreign department of Bethat Foundation. The Islamic Republic of Iran. 1982.
59. Simon W, Gagnon JH. Sexual scripts. Aggleton, Parker R, editors. *Culture, society and sexuality: A reader*. London: UCL Press; 1999. pp. 29-38.
60. DeLamater JD, Hyde JS. Essentialism vs. social constructionism in the study of human sexuality. *J Sex Res* 1998;35:10-8.
61. Millett K. *Sexual politics*. Garden City, NY: Doubleday Publisher; 1970.
62. Plummer K. *Symbolic interactionism*. Vol. 2. Aldershot: Edward Elgar Publishing; 1991.
63. Crotty M. *The foundations of social research: Meaning and perspective in the research process*. London; Thousand Oaks, Calif.: Sage Publications; 1998.
64. Parker RG, Gagnon J H. *Conceiving sexuality: Approaches to sex research in a postmodern world*. New York: Routledge; 1995. p. 2.
65. Skinner BF. *Science and human behavior*. New York: Macmillan Publisher; 1953.

Source of Support: This study is funded by a grant from Isfahan University of Medical Sciences, with grant code: 390435, **Conflict of Interest:** Nil.