Perception of the association between erectile dysfunction and cardiovascular disease among Chinese physicians: an online survey

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Abstract

Objective: There is a close association between erectile dysfunction (ED) and cardiovascular disease (CVD). This study aimed to investigate Chinese physicians' understanding of this association.

Methods: A total of 651 physicians, including 245 cardiologists and 406 urologists, participated in our investigation through WeChat.

Results: Participants with more professional experience, a doctoral/postdoctoral degree, and an intermediate/senior title were significantly more likely to be aware of a close association between ED and CVD. Urologists had a significantly better understanding of the association of severity between both diseases, showed more positive attitudes towards phosphodiesterase type 5 inhibitor application in patients with CVD and systematic treatment, and gave greater consideration to both diseases during follow-up visits than did cardiologists. Men had a significantly better

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understanding of the associated severity of the two disorders and managed the two diseases together more actively than did women. Department, sex, professional experience, education, and affiliated hospital level significantly affected systematic management of ED and CVD.

Conclusion: Most physicians from cardiology and urology are aware of the association between ED and CVD, but this awareness may be insufficient. Department, sex, professional experience, education background, and professional title are significant factors associated with perception of this association.

Introduction

Erectile dysfunction (ED), which is defined as persistent impotence to reach and maintain an erection hard enough for successful vaginal intercourse, is a common clinical entity. Despite improvements in outcomes, cardiovascular disease (CVD) remains a leading cause of morbidity worldwide.[1–3] An increasing number of studies have indicated a particularly close association between ED and CVD.[4,5] ED and CVD share common risk factors, including age, hypercholesterolemia, hypertension, insulin resistance and diabetes, smoking, obesity, metabolic syndrome, sedentary lifestyle, and depression.[6] The incidence of ED in men with established chronic coronary artery disease is as high as 75%.[7,8] Coronary artery disease, stroke, and peripheral artery disease usually occur after the onset of ED, following a significant period ranging from 2 to 5 years in the same patient (3 years on average). The European Guidelines on CVD and ED indicate the important clinical significance of ED as a predictor of CVD.[5,9] The severity of erectile dysfunction, which is evaluated by the 5-item version of the International Index of Erectile Function, was also reported to correlate with CVD and may lead to a difference in specific CVD outcomes.[10–12]

Therefore, cardiologists' and urologists' perceptions of the associations among the pathogenesis, manifestation, diagnosis, and treatment of ED and CVD may help them seek cooperation to systematically manage patients with ED and CVD. ED has gradually and widely been accepted as a significant predictor of CVD.[9,13] Urologists cooperating with cardiologists may evaluate the risk of CVD in patients with ED. Phosphodiesterase type V (PDE5) inhibitors, which are currently the most effective treatment for ED, have a positive effect on the cardiovascular system.[14] Therefore, cardiologists can provide more assistance to patients with CVD and ED with the help of urologists. To the best of our knowledge (based on searches of Google Scholar, PubMed, Embase, and the Cochrane Library), few relevant studies have been conducted regarding this issue. Therefore, this study aimed to investigate Chinese physicians' understanding of the association between ED and CVD. We hope that this study will lead to more attention towards this association and create a new pattern of

systematic management in patients with ED and CVD under collaboration.

Material and methods

Survey and participants

This study was a survey that was conducted over 3 months from November 2018 to January 2019. The English version this survey is available in the appendix located at the end of the manuscript. The website link of the questionnaire was distributed in academic WeChat Groups consisting of only physicians (in this manuscript, the term "physicians" includes medical practitioners in cardiology and urology) specializing in cardiology or urology throughout China. WeChat, which is the most popular communication tool in China with more than one billion monthly active users presently,[15] and is a time-effective, cost-effective, and convenient method, was used in our investigation. WeChat is frequently involved in doctors' daily lives for medical consultations, treatment, and follow-up,[16,17] and connection and discussion of medical topics among colleagues.[18] Participants were able to click the website link of the questionnaire shared in WeChat groups and then start the survey. Under each WeChat ID (identity), the questionnaire could be completed only once. All subjects provided written informed consent and were required to respond voluntarily and under the condition of anonymity. The investigation and all relevant protocols were evaluated and approved by the ethics committee of Xiangya Hospital, Central South University.

The survey involved two sections, including the demographic information section and the cognitive section. The demographic information section included age, sex, professional experience, educational background, professional title ("primary" referred to residents, "intermediate" referred to attending physicians, and "senior" referred to chief physicians or deputy chief physicians), and the level of the hospital. The cognitive section aimed to uncover participants' understanding of the association between ED and CVD.

Statistical analysis

Data are presented as the mean ± standard deviation when normally distributed, median (quartiles) when non-normally distributed, and percentages for categorical data. Data were analyzed using SPSS Statistics, version 22 (IBM Corp., Armonk, NY, USA). The χ^2 test was used to compare differences between participant groups. Univariate regression analysis was used to identify the effect of various factors on participants' simultaneous or systemic treatment of ED and CVD. Odds ratios (ORs) are reported with 95% confidence intervals. A P value <0.05 was considered statistically significant.

Results

Overview of the survey

A total of 1073 physicians visited our questionnaire through WeChat, with 664 participants from 24 provinces in China (a total of 34 provinces), including 250 cardiologists and 414 urologists who completed the interview. Thirteen questionnaires (five in cardiology and eight in urology) were excluded because of incorrect information in age or professional years. The mean age of the remaining 651 participants was 34 ± 9 years and the mean professional experience was 9.3 ± 8.5 years. A total of 63.4% of participants were men and the proportion of male sex was significantly lower in cardiology compared with urology (35.1% vs 80.5%, $P < 0.001$). The rates of participants with primary and senior titles were 51.8% and 17.1%, respectively. A total of 17.1% and 30.6% of participants were from

community and secondary hospitals, respectively, and the remaining 52.2% of participants were from tertiary hospitals. No significant differences were detected between cardiologists and urologists, except for sex.

Characteristics of the participants based on the understanding of the association between ED and CVD

A total of 552 (84.8%) participants believed that ED was associated closely with the risk of CVD, while 99 (15.2%) did not. Age, sex, and hospital level did not affect participants' belief of the association between ED and the risk of CVD. Participants with more professional experience ($P = 0.028$) or a doctoral degree ($P = 0.042$) were significantly more likely to believe in a close relationship between ED and CVD. However a significantly higher rate of participants with a primary

title considered that ED was not closely associated with CVD ($P = 0.010$) (Table 1).

Cardiologists versus urologists

Most participants from cardiology or urology were aware of the close association between ED and the risk of CVD. However, a significantly higher rate of cardiologists considered ED as a natural aging process rather than a disease compared with urologists ($P = 0.002$). Furthermore, a significantly higher percentage of urologists believed that the severity of ED was correlated with that of CVD compared with cardiologists ($P < 0.001$) (Table 2).

The most popular response when considering the most important association between ED and CVD included common risk factors (40.0%), common pathophysiology (35.1%), common concomitant diseases (12.9%), common therapeutic methods or drugs (8.9%), and others (3.1%).

Table 1. Characteristics of participants based on their understanding of the association between ED and CVD.

Characteristics	ED and CVD		P
	Closely associated (n = 552)	Not closely associated (n = 99)	
Age, years	34.28 ± 8.82	32.40 ± 8.87	0.520
Male sex	354 (64.1%)	59 (59.6%)	0.388
Years of practice	9.60 ± 8.66	7.56 ± 7.56	0.028
Educational background			
College/junior college degree	295 (53.4%)	60 (60.6%)	0.187
Postgraduate degree	162 (29.3%)	30 (30.3%)	0.848
≥Doctoral degree	95 (17.2%)	9 (9.1%)	0.042
Professional title			
Primary title	274 (49.6%)	63 (63.6%)	0.010
Intermediate title	178 (32.2%)	25 (35.3%)	0.167
Senior title	100 (18.1%)	11 (11.1%)	0.088
Level of hospital			
Community hospital	91 (16.5%)	21 (21.2%)	0.251
Secondary hospital	164 (29.7%)	35 (35.4%)	0.262
Tertiary hospital	297 (53.8%)	43 (43.4%)	0.057

Values are mean ± standard deviation or n (%).
ED: erectile dysfunction, CVD: cardiovascular disease.

Table 2. Comparison of perceptions between cardiologists and urologists.

Perceptions	Cardiologists (n = 245)	Urologists (n = 406)	P
ED is regarded as a natural aging process rather than a disease	149 (60.8)	197 (48.5)	0.002
ED is closely associated with CVD	210 (85.7)	342 (84.2)	0.611
Association of severity of ED and CVD	130 (53.1)	291 (71.2)	<0.001
ED and CVD are managed together/systemically	66 (26.9)	358 (88.2)	<0.001
Effect of PDE5 inhibitor administration on patients with CVD			
Benefit	48 (19.6)	103 (25.4)	0.910
Harm	148 (60.4)	192 (47.3)	0.001
No effect	49 (20.0)	111 (27.3)	0.035
Main concern about PDE5 inhibitor administration in patients with CVD			
No concern	54 (22.0)	84 (20.7)	0.683
Safety	168 (68.6)	211 (52.0)	<0.001
Validity	27 (6.9)	72 (17.7)	0.021
Other	6 (2.4)	39 (9.6)	<0.001
Consideration of ED and CVD during the follow-up visit	70 (28.6)	371 (91.4)	<0.001

Values are n (%).
ED: erectile dysfunction, CVD: cardiovascular disease, PDE5: phosphodiesterase type V.

A significantly higher proportion of urologists considered common pathophysiology as the most important association than did cardiologists ($P < 0.001$), while more cardiologists considered common concomitant diseases ($P < 0.001$) (Figure 1a). The most popular response when considering major clinical significance of the association between ED and CVD included diagnosis (56.3%), treatment (30.3%), prognosis (10.7%), and others (2.8%). A significantly higher proportion of cardiologists considered diagnosis as the major clinical significance compared with urologists ($P < 0.001$), while significantly more urologists than cardiologists chose treatment ($P < 0.001$) (Figure 1b).

A total of 10.6% (26/245) of cardiologists indicated that they would inquire about the problem of ED in recording the patient's history in patients with CVD and 23.3% (57/245) would provide a further test when ED was diagnosed in a patient with CVD. However, 89.7% (364/406) of urologists would take into consideration cardiovascular problems as a regular item in recording the patient's history and 75.9% (308/406) would evaluate cardiovascular problems with a further test.

When a patient was diagnosed with both ED and CVD, cardiologists appeared to manage ED and CVD together or systematically less actively than did urologists (26.9% vs 88.2%, $P < 0.001$). A significantly higher rate of cardiologists believed that a PDE5 inhibitor was harmful to patients with CVD compared with urologists ($P = 0.001$). Furthermore, a significantly higher rate of cardiologists expressed concern about problems in safety caused by PDE5 inhibitor use compared with urologists ($P < 0.001$). However, a significantly higher rate of urologists expressed concern about the validity of a PDE5 inhibitor compared with cardiologists ($P = 0.021$). During a follow-up visit, a significantly higher rate of urologists paid more attention to both disorders than did cardiologists ($P < 0.001$) (Table 2).
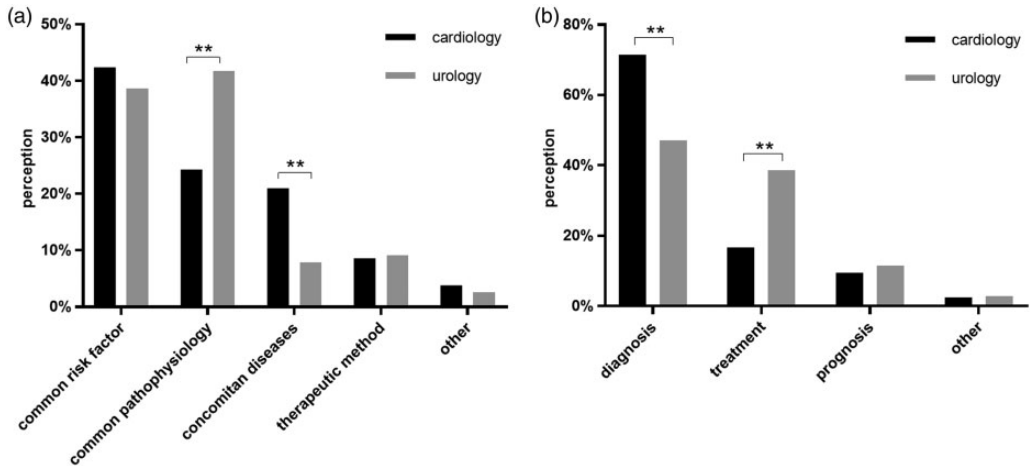
Figure 1. (a) The most important association between ED and CVD according to cardiologists' and urologists' responses to question 9 in the questionnaire ("What is the most important association between ED and CVD?"). **$P < 0.001$. (b) Major clinical significance of the association of ED and CVD according to cardiologists' and urologists' responses to question 10 in the questionnaire ("What is the major instructive clinical significance of ED or CVD taking into account the association between these two disorders?"). **$P < 0.001$.

Male participants versus female participants

Significantly more male participants regarded ED as a disease rather than a natural aging process compared with female participants ($P = 0.004$). Significantly more male participants believed that there was an association between the severity of ED and the risk of CVD compared with female participants ($P = 0.018$). Additionally, a significantly higher proportion of male participants managed both diseases together actively ($P < 0.001$) and gave consideration to both diseases during follow-up visits, compared with female participants ($P < 0.001$) (Table 3).

Factors associated with participants' systematic treatment of ED and CVD

Urologists (OR = 20.228, $P < 0.001$), ≥10-year professional experience (OR = 2.000, $P < 0.001$), <doctoral degree (OR = 1.936, $P = 0.002$), male sex (OR = 6.091, $P < 0.001$), and being from a tertiary

hospital (OR = 1.657, $P = 0.002$) were significantly associated with conducting treatment on ED and CVD together more actively. Furthermore, those who believed that there was an association between the severity of ED and CVD (OR = 1.943, $P < 0.001$) and those who showed concern about PDE5 inhibitor administration in patients with CVD (OR = 1.656, $P = 0.010$) managed ED and CVD together more actively (Table 4).

Discussion

The existence of an association between ED and CVD is widely accepted. Not only do ED and CVD share common risk factors, but they also progress under a common pathophysiology (endothelial dysfunction).[9,19] Major vascular beds are uniformly affected by endothelial dysfunction.[20,21] Arteries supplying various areas differ in size (penis arteries are smaller than those in the heart, brain, and lower limbs). Therefore, penis arteries are affected first

Table 3. Sex differences in the perception of the association between ED and CVD.

Perceptions	Male sex (n = 413)	Female sex (n = 238)	P
ED is regarded as a natural aging process rather than a disease	202 (48.9)	144 (60.5)	0.004
ED is closely associated with CVD	354 (85.7)	198 (83.2)	0.388
Association between the severity of ED and CVD	281 (68.0)	140 (58.8)	0.018
ED and CVD are managed together/systematically	320 (77.5)	104 (43.7)	<0.001
Effect of PDE5 inhibitor administration on patients with CVD			
Benefit	98 (23.7%)	53 (22.3)	0.671
Harm	205 (49.6)	135 (56.7)	0.081
No effect	110 (26.6)	50 (21.0)	0.108
Main concern about PDE5 inhibitor administration in patients with CVD			
No concern	87 (21.1)	51 (21.4)	0.409
Safety	236 (57.1)	143 (60.1)	0.464
Validity	64 (15.5)	25 (10.5)	0.074
Other	26 (6.3)	19 (8.0)	0.414
Consideration of both ED and CVD during the follow-up visit	339 (82.1)	102 (42.9)	<0.001

Values are n (%).
ED: erectile dysfunction, CVD: cardiovascular disease, PDE5: phosphodiesterase type V.

Table 4. Factors associated with participants' systematic management of patients with ED and CVD.

Characteristics	OR	95% CI	P value
Department (urology vs cardiology)	20.228	13.385–30.566	<0.001
Age (≥40 vs <40)	0.901	0.608–1.335	0.602
sex (men vs women)	6.091	4.274–8.680	<0.001
Professional years (≥10 vs <10)	2.000	1.417–2.822	<0.001
Educational background (<doctoral degree vs ≥doctoral degree)	1.936	1.266–2.959	0.002
Professional title (≥senior title vs < senior title)	1.086	0.705–1.673	0.709
Level of hospital (≤tertiary hospital vs tertiary hospital)	1.657	0.197–2.292	0.002
ED is regarded as a natural aging process rather than a disease (yes vs no)	0.775	0.560–1.072	0.123
ED is closely associated with CVDs (yes vs no)	0.923	0.587–1.451	0.728
There is an association between the severity of ED and CVD (yes vs no)	1.943	1.391–2.712	<0.001
Effect of PDE5 inhibitor administration on patients with CVD (uninfluential vs not influential)	0.691	0.469–1.019	0.061
Concern about PDE5 inhibitor administration in patients with CVD (concerned vs not concerned)	1.656	1.129–2.430	0.010

OR: odds ratio, CI: confidence interval, ED: erectile dysfunction, CVD: cardiovascular disease, PDE5: phosphodiesterase type V.

by endothelial dysfunction because of their smaller size.[22] Consequently, ED can be regarded as an early warning system or the "tip of the iceberg" of a systemic vascular disease. Novel therapies based on molecular mechanisms of ED may serve as promising therapies for CVD characterized by endothelial dysfunction.

Participants with more experience and better education are more likely to believe in a close association between ED and CVD

In our study, the majority of participants (552/651, 84.8%) believed in a close association between ED and CVD. Additionally, their age and sex did not significantly affect their understanding of this association. The participants' understanding of this association may be a result of research focusing on the association between ED and CVD, and this association has been clarified in ED and CVD guidelines.[9,13] Longer professional experience and a better educational background contributed to the participants' understanding of this association, but the level of their affiliated hospital did not.

Urologists show a better understanding of the association between ED and CVD than do cardiologists

Participants in cardiology and urology mostly agreed that there was a close association of ED and CVD. In cardiologists, the most popular answer for the most important association between ED and CVD was common risk factors, whereas common pathophysiology was the most popular in the urology group. In fact, common pathophysiology (endothelial dysfunction) fundamentally leads to the close association between ED and CVD.[4,23] Therefore, urologists may have a better understanding of the association between

these disorders. Additionally, among cardiologists, the most popular answer for major instructive clinical significance of the association between ED and CVD was diagnosis (71.4%), whereas treatment (38.6%) was the most popular in urologists. This difference between the specialists may be a consequence of their different professional backgrounds. ED being considered a predictor of CVD has gradually been accepted by cardiologists.[24] However, urologists may pay more attention to the benefit to patients with CVD due to treatment of ED, including modification of risk factors and drugs, such as PDE5 inhibitors.

In our study, a significantly higher proportion of urologists considered that the severity of ED was associated with the extent of CVD compared with cardiologists. The risk of CVD and the number of deaths from CVD have increased steadily with the severity of ED.[10] The number of obstructed vessels detected by coronary angiography is correlated with the severity of ED in male patients with acute myocardial infarction.[25] Therefore, urologists may develop a better understanding than cardiologists of the association of severity of these diseases.

In the current study, only a small amount of cardiologists regularly inquired about problems of ED in cardiovascular patients and assessed ED with further tests when ED was diagnosed in a patient with CVD. In contrast, the majority of urologists inquired about CVD in patients with ED and evaluated these patients with further tests. Several factors may be responsible for this large difference between specialists. First, in our survey, most cardiologists regarded ED as a natural progression that occurs with age rather than a disorder. As a result, they may not pay attention to problems of ED, even though the problems are associated with CVD and are extremely common in men with cardiovascular problems.[7,26] Second, urologists may develop a

better understanding of this association, and therefore, may pay more attention to it.

We also found that cardiologists appeared to manage ED and CVD together or systematically less actively than did urologists. Additionally, a significantly lower rate of cardiologists gave consideration to both ED and CVD during the follow-up visit than did urologists. Cardiologists' negative attitude towards managing ED and CVD together or systematically in the same patient may be partly a result of their characterization of ED as a natural age-related process. We also found that most cardiologists worried about the harmful effects of PDE5 inhibitors on patients with CVD, which may be another obstruction in the management of both disorders. In fact, a strong body of clinical data has confirmed the tolerability and established safety of PDE5 inhibitors in patients with or without CVD.[27,28] Additionally, PDE5 inhibitors are not associated with an increased risk of exacerbating ischemia and worsening exercise tolerance in patients with coronary artery disease, even though PDE5 inhibitors are widely known as a contraindication to nitrates or other nitric oxide donors. Finally, lifestyle modification and pharmacotherapy, according to recommendations for reducing the risk of CVD, are effective in improving erectile function.[29] PDE5 inhibitors, which are the first-line and most effective therapies for ED currently available,[13] are generally reported to have a positive effect on the cardiovascular system.[5,14,30,31] Urologists might manage comorbid ED and CVD more actively because they have noted improved benefits that result from systemic treatment of both diseases. Additionally, cardiologists' excessive concerns about PDE5 inhibitors may be unnecessary. Of course, appropriate clinical assessment and a medication review should be performed before administration of PDE5 inhibitors on patients with CVD.

Male participants show a better understanding of the association between ED and CVD than do female participants

Generally, we found that male physicians showed greater understanding of the association between ED and CVD and were more active in managing ED and CVD together or simultaneously than female physicians. Several possibilities may contribute to these findings. The main reason might be that doctors find communicating about sexual functioning with an opposite sex patient unpleasant, especially when the patient is young or much older in age.[32] ED and CVD usually coexist in older male patients; therefore, female physicians may be more uncomfortable in inquiring about details of sexual illnesses. Moreover, the conservative social atmosphere, which is rooted in traditional Chinese culture, may increase female physicians' discomfort in communicating about sexual matters with older male patients.[33,34] As a result, female participants in our study showed a lower understanding of the association between ED and CVD and less active management of comorbid ED and CVD. In our survey, there was a significantly higher rate of female cardiologists than female urologists. Female participants' worse understanding of the association between ED and CVD may also be responsible for cardiologists' poorer overall understanding of this association.

Participants' department, sex, professional experience, educational background, and understanding of the association between ED and CVD affect their systematic management of patients with ED and CVD

We found that department, sex, professional experience, educational background, and

the level of the affiliated hospital were factors that affected participants' management of comorbid ED and CVD. However, participants with a superior education who had a better understanding of the association between ED and CVD, showed less active involvement in systematic treatment of both diseases. This finding may be because several extra years of education are required to obtain a doctoral or postdoctoral degree before clinical work, which may lead to a lack of professional experience, which is another significant factor associated with systematic treatment of ED and CVD. Additionally, whether participants managed comorbid ED and CVD appeared to be associated with their understanding of the association of severity of both diseases and concern about the administration of PDE5 inhibitors in patients with CVD. Those with a better perception of this association appeared to have better performance in managing ED and CVD together or systematically.

Limitations

Our study had several limitations. First, our survey was conducted using an online platform, namely WeChat (non-WeChat methods were not included), which has become the most widely and frequently used social media platform in China. In fact, WeChat has nearly saturated its growth potential in China, with more than 1 billion monthly active users at present.[15] Although WeChat users were more evenly distributed by age group in 2017 than they were in 2015, young users are still the predominant age group using the platform.[35] Our study might have ignored a small number of participants who were not users or frequent users of WeChat, especially older participants. Second, there might have been some bias due to different professional backgrounds. Urologists and cardiologists may have had a different understanding of the same questions in our questionnaire. Third, participants may have responded to the questionnaire with what they felt was the appropriate answer rather than responding with the truth. Fourth, the questionnaire was not validated because it was not strictly a dichotomously scored questionnaire. Finally, the results may have been more accurate if the sample size had been larger.

Conclusion

Physicians from cardiology or urology have a primary awareness of the association between ED and CVD. Urologists have a better understanding of this association than do cardiologists, and male participants had a better understanding than did female participants. Additionally, participants with more professional experience, a better educational background, and a higher professional title had better understanding of the association between ED and CVD. However, understanding of this relationship among physicians in cardiology or urology may still be insufficient and should be further improved.

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Appendix (questionnaire document used in this survey)

Demography (fill in the blank or check the appropriate box)
Department: ☐ Cardiology   ☐ Urology
1. Age: (years old)
2. Sex: ☐ Male   ☐ Female
3. Education:
   ☐ College degree/junior college degree   ☐ Postgraduate degree
   ☐ Doctoral degree   ☐ Postdoctoral degree
4. Professional experience: (years)
5. Professional title:
   ☐ Primary title   ☐ Intermediate title   ☐ Senior title
6. Level of your hospital:
   ☐ Community hospital   ☐ Secondary hospital   ☐ Tertiary hospital

Questions (check the appropriate box)
7. Is ED a natural process of senile aging or a disease in your opinion?
   ☐ A natural process of senile aging   ☐ A disease

8. Is there a close association between ED and CVD?
   ☐ Yes   ☐ No
   If you answered "yes" to question 8, please respond to questions 9 and 10; otherwise, please skip to question 11.
9. What is the most important association between ED and CVD?
   ☐ Common risk factors   ☐ Common pathophysiology   ☐ Common concomitant diseases
   ☐ Common therapeutic method or drugs   ☐ Other
10. What is the major instructive clinical significance of ED or CVD taking into account the association between these two disorders?
    ☐ Diagnosis
    ☐ Treatment
    ☐ Prognosis
    ☐ Other
11. Do you believe that the severity of ED is associated with the severity of CVD?
    ☐ Yes   ☐ No
    If you are a cardiologist, please respond to questions 12 and 13; if you are a urologist, please respond to questions 14 and 15.
12. Do you include erectile function issues as a regular item when recording the history of patients with CVD?
    ☐ Yes   ☐ No
13. Would you evaluate ED in cardiovascular outpatients with further testing when ED is diagnosed in a patient with CVD?
    ☐ Yes   ☐ No
14. Do you include cardiovascular problems as a regular item when recording the history of patients' with ED?
    ☐ Yes   ☐ No
15. Would you evaluate cardiovascular problems in patients with ED with further testing when CVD is diagnosed in a patient with ED?
    ☐ Yes   ☐ No
16. If you have a patient with both ED and CVD, would you manage both disorders together or systematically?
    ☐ Yes   ☐ No
17. What is the nature of the effect of phosphodiesterase type 5 (PDE5) inhibitors when administered to patients with CVD?
    ☐ Beneficial   ☐ Harmful   ☐ No effect
18. What is your main concern about administration of a phosphodiesterase type 5 (PDE5) inhibitor in patients with CVD?
    ☐ No concern   ☐ Safety   ☐ Validity   ☐ Other
19. Do you pay attention to both ED and CVD during the follow-up of patients with both disorders?
    ☐ Yes   ☐ No