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ORIGINAL PAPER

Penile curvature management in Italy: A survey analysis by the Italian Society of Urology

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Summary ***Objective: To provide an updated national overview of the clinical management of congenital and acquired penile curvature (PC) in Italy, evaluating current diagnostic and therapeutic practices among Italian urologist.***

Materials and methods: A 23-item anonymous digital survey was distributed by the Italian Society of Urology (SIU) to 2034 affiliated urologists between 2024 and 2025. The survey includes demographic data, diagnostic approaches, and treatment strategies for PC, including Peyronie's disease (PD). Participants were categorized by practice setting and geographic region. SPSS software was used to conduct descriptive and comparative analyses.

Results: Overall, 442 urologists had completed the survey (response rate: 21.7%). Most participants were affiliated either with university hospitals (34.6%) or public non-university hospitals (32.8%). The major incidence of PD cases, as reported by 310 (70.1%) respondents, were in patients between 45-60 years old and the most frequent presentation was a dorsal curvature (223 responses, 50.5%). The routine clinical practice, as reported by respondents, includes anamnestic data with photographs collection and penile ultrasound (in 261 (59%) and 188 (42.5%) of respondents, respectively), while penile dynamic CCDU was mainly used in patients with erectile dysfunction. In regard of therapeutic strategies, 142 (32.8%) of urologist used Clostridium Collagenase Histolyticum (CCH) for intralesional therapy; a similar proportion used verapamil/nicardipine, despite limited supporting evidence. Interestingly, surgical approaches varied widely: tunica plication was preferred in non-complex cases by 169 (38.2%), while penile prosthesis was offered in complex cases by 129 (29.2%) urologists. Finally, penile prosthesis implantation was offered in patients with severe ED unresponsive to pharmacological therapy, regardless of penile curvature only by 176 respondents (39.8%), meanwhile, 177 respondents considering penile prothesis only for severe PC over > 60 degrees associated with ED.

Conclusions: This nationwide survey reveals a significative heterogeneity in PC and PD management in Italy, with frequent reliance on off-label treatments and variable adherence to international guidelines. Economic limitations and regional differences appear to be a primary factor influencing clinical decisions and clinical practice. These findings underlines the need for a major dissemination of evidence-based guidelines associated to national healthcare strategies aimed at standardized care and improving patient outcomes.

KEY WORDS: *La Peyronie's disease; Italian survey; Survey; Questionnaires; Management; Penile curvature.*

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INTRODUCTION

Congenital or acquired *penile curvature* (PC) is a condition that leads to persistent impairment or discomfort during sexual intercourse. The epidemiology of PC is currently

unclear due to the limited availability of large-scale research studies. The incidence of PC has been reported at 0.6% (1), in contrast to the Birth Defects Monitoring Program which suggests a broader range of 4-10%, with ventral curvature being common and surgical correction as the standard yet debatable treatment (2, 3). Acquired curvature, often associated with *Peyronie's disease* (PD), affects 0.5% to 13% of males, primarily within the 50-60 age group. Its aetiology is potentially linked to repeated microvascular damage to the tunica albuginea, leading to fibrotic plaques. One recognized cause of PD is related to radical prostatectomy, particularly when penile rehabilitation is not performed (4, 5). The variation in incidence rates may indicate differences in diagnostic approaches and healthcare accessibility, highlighting the necessity for additional investigation into the most effective management strategies (6).

The diagnostic approach for congenital and acquired PC usually includes an anamnestic report, photographs of the erected penis and penile dynamic *color-coded doppler ultrasonography* (CCDU). However, consensus on the 'gold standard' treatment remains elusive. Intralesional treatments utilizing calcium channel antagonists such as verapamil and nicardipine were historically employed in PD management due to their affordability and accessibility. Nevertheless, contemporary evidence does not support their use due to inconclusive efficacy and variable outcomes (7). Similarly, intralesional steroids, once favoured for their immediate availability and cost-effectiveness, are now contraindicated due to significant adverse effects (8). Iontophoresis is discouraged because of insufficient evidence regarding its efficacy (9, 10), whereas extracorporeal shockwave therapy, that may alleviate penile pain, does not correct curvature or reduce plaque dimensions (11-15).

The latest EAU guidelines currently recommend intralesional *Clostridium Collagenase Histolyticum* (CCH) and interferon as not-surgical approaches (16). Surgical intervention for penile curvature and, in severe cases, implantation of penile prosthesis are among the well-assessed options (16). In the clinical practice, a considerable number of urologists persist in applying "*off-label*" therapies not supported by international guidelines, a trend largely driven by the prohibitive costs associated with collagenase treatments. This practice highlights a gap between international guideline recommendations and the real-world management of Peyronie's disease, reflecting the economic constraints within the healthcare landscape. In Table 1 we summarized the most important recommendations from European 2025 guidelines.

Materials and methods

A comprehensive, anonymous, 23-item digital survey was conducted by the *Society of Italian Urology* (SIU) and disseminated to all affiliated urologists in Italy through a mailing list of 2034 practitioners.

The survey questions were constructed through a structured meeting involving urologists (A.C., A.M., V.S., G.C., V.M.) with significant expertise in Peyronie's disease, after a critical examination of the literature and identification of gaps in the national clinical management of the condition. The survey aimed to collect detailed data on urologists' practice, patient demographics, symptomatology, diagnostic methods, and treatment practices. The 23 questions of the survey are listed in ***Supplementary Table 1*** in both original Italian language and English translation.

Initially, all collected data underwent processing and were presented in various graphical formats. Frequency statistics were then calculated to categorize participating urologists by their health facility type and regional affiliation. Lastly, the interviewed urologists were stratified into three primary geographical macro-areas of origin: Northern Italy, Central Italy, Southern Italy including the Islands. This categorization aimed to assess potential variations based on regional affiliations and to determine whether distinctions existed based on the type of healthcare facility within which the participating urologists practiced.

The survey was designed to require responses to all questions, precluding the possibility of missing data, and no data imputation techniques were utilized. Data analysis was

Table 1.
Summary of EAU recommendation for the management of Peyronie's disease (PD) [16].

DIAGNOSTIC EVALUATION
Take a medical and sexual history of patients with PD and perform a physical examination, including assessment of palpable plaques, stretched or erect penile length, degree of curvature.
DISEASE MANAGEMENT: CONSERVATIVE TREATMENT
Offer conservative treatment to patients not fit for surgery or when surgery is not acceptable to the patient.
Fully counsel patients regarding all available treatment options and outcomes before starting any treatment.
Do not offer oral treatment with vitamin E, potassium para-aminobenzoate (potaba), tamoxifen, pentoxifylline, colchicine and acetyl esters of carnitine; or intralesional treatment with steroids/platelet-richplasma/hyaluronic acid; or ESWT to treat PD.
Use nonsteroidal anti-inflammatory drugs to treat penile pain in the acute phase of PD.
Offer intralesional therapy with Collagenase Clostridium Histolyticum to patients with stable PD and dorsal or lateral curvature > 30 degrees, who request non-surgical treatment, although the placebo effects are high.
DISEASE MANAGEMENT: SURGICAL TREATMENT
Perform surgery only when PD has been stable for at least three months.
Use tunical shortening procedures as the first treatment option.
Use penile prosthesis implantation, with or without any additional straightening procedures in PD patients with ED not responding to pharmacotherapy.
PD: Peyronie's disease; ESWT: External show-waves treatment; ED: Erectile disfunction.
The aim of this study was to survey the contemporary clinical management of PC in Italy providing a snapshot of current practices in the diagnosis and treatment of this condition.

performed using IBM *Statistical Package for Social Science* (SPSS), with nominal data represented by numbers and percentages, while nonparametric data was characterized using median, range and *interquartile range* (IQR) metrics.

Results

The complete survey was filled out by 442 urologists with a response rate of 21.7%. Demographics and clinical data of the survey respondents are summarized in Table 2. The most common affiliations of survey respondents were university hospital and public non-university hospital in 153 (34.62%) and 145 (32.81%) cases, respectively.
Overall, 310 (70.1%) respondents reported that the highest rate of patients affected by IPP was between 45 and 60 years (80 responses; 18.1%), followed by patients between 60 and 70 years old. The dorsal curvature emerged as the most prevalent among reported cases (223 responses,

Table 2.
Demographics and clinical data of survey respondents (n = 442).

Survey question	Survey response	N (%)
Type of institution of responders on survey; n (%)	University Hospital	153 (34.62)
	Non-University Hospital or General Hospital	145 (32.81)
	IRCCS	30 (6.79)
	Accredited Private Hospital	64 (14.48)
	Private Facility	50 (11.31)
Patients with IPP visited in one month by respondents; n (%)	1-2	103 (23.3)
	< 5	142 (32.1)
	5-10	115 (26)
	10-15	42 (9.5)
	> 15	40 (9)
Most frequent age range of patients affected by IPP reported by respondents; n (%)	< 30	4 (0.9)
	30-45	46 (10.4)
	45-60	310 (70.1)
	60-70	80 (18.1)
	> 70	2 (0.5)
Most frequent direction of penile curvature reported by respondents; n (%)	Ventral	30 (6.9)
	Dorsal	223 (50.5)
	Left side	56 (12.7)
	Right side	6 (1.4)
	Indifferent	127 (28.7)
Rate of patients with moderate-severe ED at outpatient clinical evaluation reported by respondents; n (%)	0-20%	131 (29.6)
	20-40%	196 (44.3)
	40-60%	91 (20.6)
	60-80%	23 (5.2)
	80-100%	1 (0.2)
Type of diagnostic support most used to detect penile curvature by respondents; n (%)	A simple photo during medical history collection	261 (59)
	ICI	29 (6.6)
	During the execution of a D-CDDU	114 (25.8)
	Vacuum device	0
	Indifferent	38 (8.6)
Performing Penile US vs. Penile Dynamic CCDU for diagnosis confirmation; n (%)	US always, while penile dynamic CCDU only in patients with concomitant DE	188 (42.5)
	Only penile US to better define the position, size, and calcification of plaques, also for possible corrective surgical intervention	65 (14.7)
	Only penile dynamic CCDU in patients with DE, for the study of vascular anatomy and highlighting any hemodynamic alterations	45 (10.2)
	Both always	126 (28.5)
	Never	18 (4.1)
Use of PDQ; n (%)	Always for all patients with IPP	35 (7.9)
	Exclusively in cases where the medical history has not sufficiently alleviated my uncertainties	57 (12.9)
	Applied exclusively for a more in-depth examination of psychological responses to the disease	35 (7.9)
	Used solely for research endeavours	70 (15.8)
	Never employed due to a lack of useful diagnostic information; Psychological evaluation delegated to specialists	245 (55.4)
Use of IIEF questionnaire; n (%)	Always	187 (42.3)
	Exclusively in the presence of a severe penile curvature	20 (4.5)
	Only when the patient reports discomfort during erections	7 (1.6)
	Exclusively when the patient reports challenges engaging in sexual intercourse with their partner	160 (36.2)
	Never; I do not perceive it as essential for making therapeutic decisions.	68 (15.4)

Use of CT or MRI to assist the diagnosis; n (%)	Solely for acquiring supplementary details about the position and size of the plaque in cases where the existing data are inadequate	42 (9.5)
	Exclusively as part of preparations for corrective surgery	49 (11.1)
	Only for obtaining additional insights into penile vascularization	8 (1.8)
	In order to explore any unnoticed malformations of the urogenital tract	20 (4.5)
	Never	323 (73.1)

Clostridium Collagenase Histolyticum (CCH); Colour Doppler Ultrasound (CDU); Colour-Coded Doppler Ultrasound (CCDU); Computed Tomography (CT); Erectile Dysfunction (ED); Extracorporeal Shock Wave Therapy (ESWT); Intracavernous Injection (ICI); Institute for Research and Healthcare with a Scientific Character (IRCC); International Index of Erectile Function (IIEF); Interferon α-2b (IFN-α2b); Magnetic Resonance Imaging (MRI); Non-steroidal anti-inflammatory drugs (FANS); Penile Curvature (PC); Peyronie's Disease (PD); Peyronie's Disease Questionnaire (PDQ).

Table 3.
Treatment of IPP of survey respondents (n = 442).

Survey question	Survey response	N (%)
Initial phase therapy; n (%)	Upon the patient's expression of discomfort during erections	63 (14.3)
	In order to prevent the progression of the disease	69 (15.6)
	When surgical eligibility is not applicable to the patient	4 (0.9)
	If the patient declines surgical intervention	9 (2.0)
	For any combination of two or more of the aforementioned reasons	297 (67.2)
Topical injection; n (%)	Exclusively utilizing intra-plaque injections	82 (18.6)
	Intra-plaque injections when the plaque exhibits limited calcification	83 (18.8)
	Both intra-plaque and peri-plaque injections	117 (26.5)
	Restrict the injections to peri-plaque areas	35 (7.9)
	Never	125 (28.3)
Topical medication employed; n (%)	CCH	145 (32.8)
	Verapamil and nicardipine	142 (32.1)
	Betamethasone	84 (19.0)
	Hyaluronic acid	69 (15.6)
	Interferon alpha-2b	2 (0.5)
Complications of CCH; n (%)	Corporal rupture	5 (1.1)
	Penile hematoma	72 (16.3)
	Penile edema	39 (8.8)
	Pain at the injection site or penile discomfort	179 (40.5)
	Experience of more than one of the above conditions	147 (33.3)
ESWT in the acute phase; n (%)	Always required as a prerequisite before considering oral therapy	25 (5.7)
	Solely when paired with pharmacological treatment	80 (18.1)
	Exclusively if pain occurs during erection	97 (21.9)
	Strictly as a temporary solution	41 (9.3)
	No, I do not view it as equally effective in alleviating symptoms compared to pharmaceutical treatment	199 (45.0)
Other instrumental therapies; n (%)	Concurrently with pharmacological treatment but limited to mild curvatures (< 60 degrees)	137 (31.0)
	In conjunction with pharmacological treatment but exclusively in the absence of severe ED	31 (7.0)
	As a substitute for pharmacological treatment	20 (4.5)
	Specifically recommend the vacuum device for patients with ED	61 (13.8)
	No, I do not endorse the corrective potential of these alternative therapies	193 (43.7)
Surgical approach for non-complex patient*; n (%)	Tunica plication, exclusively when there is no concurrent ED	90 (20.4)
	Tunica plication, but only if ED shows a positive response to pharmacological treatment	41 (9.3)
	Tunica plication, either in the absence of ED or if ED responds favourably to pharmacological treatment	163 (36.9)
	Tunica plication or plaque incision/excision based on penile length	138 (31.2)
	Penile prosthesis	10 (2.3)
Surgical approach for complex patients *; n (%)	Plaque incision or excision with or without graft, exclusively applicable in instances of normal pre-operative erectile function	94 (21.3)
	Plaque incision or excision with or without graft, specifically reserved for cases of mild pre-operative ED that is well controlled with pharmacological therapy	82 (18.6)
	Plaque incision or excision with graft, particularly recommended in situations involving compromised penile length	97 (21.9)
	Tunica plication	40 (9.0)
	Penile prosthesis	129 (29.2)
Penile prothesis implantation; n (%)	Any patient exhibiting severe penile curvature (> 60 degrees)	40 (9.0)
	Patients with severe ED unresponsive to pharmacological therapy, with penile curvature < 60 degrees	39 (8.8)
	Patients with severe ED unresponsive to pharmacological therapy, and with PC > 60 degrees	177 (40.0)
	Patients with severe ED unresponsive to pharmacological therapy, regardless of PC	176 (39.8)
	Patients with severe ED responsive to pharmacological therapy but non-compliant with oral therapy	10 (2.3)

** Complex patient is defined as: short penis, and/or < 60 degrees of penis curvature, and/or association of anatomical complexity (i.e. hourglass deformity).*

50.5%). Additionally, 261 (59%) respondents employed photographic documentation for recording characteristics of PC, while 188 (42.5%) respondents consistently adopted *ultrasound* (US), reserving penile dynamic CCDU for cases involving ED to aid in differential diagnosis. In terms of use of diagnostic examinations like CT or MRI, the majority of urologists (323 respondents, 73%) reported never incorporating these imaging modalities.

Treatments for IPP reported by respondents are summarized in Table 3. Focusing on topical therapy, 142 (32.8%) respondents administered infiltrations of CCH and an equal percentage opted for verapamil and nicardipine (32.1%), while the remainder utilize betamethasone or acid hyaluronic. *External shock wave lithotripsy* (ESWT) in the acute phase was not considered as equally effective in alleviating symptoms compared to pharmaceutical treatment for 199 of the urologists (45%) and it was administered by 97 of the respondents (21%) exclusively if pain occured during erection. Focusing on surgical approach, in non-complex patients (defined as short penis, and/or < 60 degrees of penis curvature, and/or association of anatomical complexity (i.e., hourglass deformity), 169 (38.2%) urologists reported that tunica plication was the treatment of choice, either in the absence of ED or if ED was present but responded favourably to pharmacological treatment. Conversely, 138 (31.2%) respondents offer either tunica plication or plaque incision, or excision basing on penile length. In complex patients, 129 (29.2%) respondents offered penile prothesis and 94 (21.3%) respondents considered as first approach plaque incision or excision with or without graft, exclusively applicable in instances of normal pre-operative erectile function). Finally, penile prothesis implantation was offered in patients with severe ED unresponsive to pharmacological therapy regardless of penile curvature only for 39.8% (176 respondents), meanwhile, 177 respondents considering penile prothesis only for severe PC over > 60 degrees associated with ED.

Discussion

Our study presents a comprehensive overview, constituting one of the largest surveys on clinical urological contemporary practice in Italy encompassing 442 responses. These findings highlight a significant gap between latest (2025) European guidelines (16) and clinical practice, revealing that certain aspects, though clear in guidelines, are often overlooked by a considerable proportion of urologists. This discrepancy is especially critical given by the prevalence of PD, estimated to affect approximately 10% of the male population, with higher occurrences among those with ED, diabetes, and cardiovascular diseases (17, 18). Despite potential underreporting, increased awareness and a rise in andrological outpatient evaluations underline the need to address this gap (19).

Variations in anamnestic data collection methods were observed, with less than half of respondents utilizing recommended approaches. Treatment approaches also exhibited diversity, with notable differences in preferences among practitioners. While 32% of respondents opted for infiltrations of CCH, an equal percentage chose verapamil and nicardipine, indicating a lack of unanimous consensus. The therapeutic landscape for PD has been significantly shaped by the history of market availability of CCH. CCH was approved by the *European Medicines Agency* (EMA) in February 2015 for the treatment of PD in adults and its adoption in Italy was subsequently managed by the national drug agency, with specific restrictions of use and reimbursement that limited its accessibility to a subset of centers. Despite its proven efficacy and endorsement by international guidelines, the manufacturer announced the withdrawal of the product from the European market in November 2019 for commercial reasons, not due to safety or efficacy concerns. This withdrawal, which became effective in early 2020, created a therapeutic void for patients and clinicians. As a result, the use of off-label and non-evidence-based treatments, such as intralesional verapamil and nicardipine, has continued to be a common practice, driven by economic constraints and the lack of a guideline-endorsed alternative in the Italian and broader European healthcare systems. Despite this, it is crucial to note that CCH emerged as a viable option for selected cases during the survey distribution. Additionally, treatment success was more likely in patients with longer PD duration, greater baseline penile curvature, and basal plaque location (20).

Objective assessment of PC during an erection is crucial, but diagnostic imaging like CT scans and MRIs have limited utility. Instead, practical methods should be considered such as capturing images of natural erections by taking a photography at home, conducting vacuum-assisted erection test, or using *intracavernosal injection* (ICI) with vasoactive agents. In our survey, clinical investigation was the primary method of diagnosis. Yet, it is notable that many respondents from Southern Italy or from the islands preferred diagnosis via CCDU with vasoactive agents.

While validated questionnaires like the IIEF-5 are commonly used, their specific validation for PD patients is lacking (21). Notably, ED prevalence ranging from 30% to 70.6% in PD underscores the importance of timely assessment (22, 23).

In Italian clinical practice, assessment often begins when patients self-report difficulties in sexual intercourse with their partners (36%).

The survey results show notable differences in diagnostic methods across regions, especially in the use of penile CCDU, which is more commonly applied in Southern Italy. These differences may be linked to variations in healthcare access, physician training, or local resource availability, highlighting the importance of promoting consistent diagnostic standards nationwide.

In addition to diagnostic discrepancies, the survey highlighted substantial heterogeneity in the therapeutic management of PD. International guidelines advise against oral treatments for PD due to their demonstrated lack of efficacy (*Tamoxifen, Colchicine, Vitamin E, and Procarbazine*) or insufficient supporting evidence (*POTABA, L-carnitine, and Pentoxifylline*) (20-22). This stance is grounded in the identification of methodological flaws in the available studies and on concerns about the risk of delaying more effective treatments even without adverse events. Despite such guidance, our findings reveal that off-label treatments remain widely used: for instance, 32.1% of respondents reported using verapamil or nicardipine infiltrations, therapies with limited supporting evidence, while

only 0.5% reported use of IFN-α2b, despite its proven efficacy and guideline endorsement.

IFN-α2b treatment consistently reduces curvature by over 20% in most PD cases, regardless of plaque location (24, 25). Its mild side effects, like sinusitis and flu-like symptoms, can be managed effectively with NSAIDs before injection. Given the moderate data strength, IFN-α2b is recommended for stable-phase PD treatment (evidence 2b in EAU guidelines). Yet, its underutilization highlights a broader issue of poor guideline penetration into daily clinical practice.

Our survey also confirmed limited enthusiasm for *extracorporeal shockwave therapy* (ESWT), in line with literature showing minimal benefit for curvature reduction. Only 21% of urologists reported using ESWT, and among those, nearly half applied it exclusively for managing erection-related pain. Moreover, 45% of respondents did not perceive ESWT as effective when compared to pharmaceutical or surgical treatment. This suggests a cautious, but variable, acceptance of ESWT within the urological community, consistent with clinical trial outcomes and current recommendations. Four randomized clinical trials and one meta-analysis were conducted to evaluate the efficacy of ESWT for PD (26). While all trials demonstrated positive outcomes in terms of pain relief, no significant effects were observed on penile curvature and plaque size. In our survey, only 21.9% of respondents considered ESWT use in accordance with the EAU guidelines. However, a majority of participants did not view it as effective in symptom relief compared to pharmacological treatment and/or surgery (45%).

Some studies suggested that PDE5 inhibitors, primarily indicated for erectile dysfunction, might offer therapeutic benefit as adjunct treatments for Peyronie's disease, potentially due to their antifibrotic properties and promotion of penile tissue oxygenation (27). Studies have reported improvements in erectile function and patient-reported outcomes when PDE5i therapy was combined with standard PD management in the acute phase. Given the substantial proportion of patients with concurrent erectile dysfunction identified in our survey, PDE5 inhibitors might represent a viable complementary therapeutic strategy, warranting further investigation in Italian clinical practice.

In terms of surgical management, our data also point to significant variability. For non-complex cases – such as those with less severe curvature or responsive erectile function – 38.2% of urologists preferred tunica albuginea plication, while 31.2% opted for a combination of plication or plaque incision/excision depending on penile length. Among patients with complex anatomy or severe PD, penile prosthesis was offered by 29.2% of respondents, whereas plaque surgery with or without grafting was selected by 21.3% only in those with preserved erectile function. Additionally, our findings revealed that only 39.8% of urologists adhered to guideline-based indications for penile prosthesis in men with severe, pharmacoresistant ED, regardless of curvature. The remaining clinicians applied prosthetic surgery more restrictively, reserving it for cases where both curvature exceeding 60 degrees and ED coexisted.

Interestingly, a recent national survey conducted among 145 urologists in the United States revealed similar deviations from guidelines, indicating a global challenge of guideline adherence (28). This observation suggests that patients seeking PD treatment might encounter varying therapies, some of which are not evidence-based, contingent on the treating urologist. *Loloi et al.* investigated urology residents' training in PD management via CCH: despite 96% of them received PD patient care training and recognized CCH as FDA-approved treatment, only 66.0% were involved in programs for training in CCH administration (29). This gap in urology resident training could compromise care quality and patient outcomes. Standardized education is essential to ensure proficient care provision, highlighting the need to align clinical practices with established guidelines for improving care delivery.

This study is not devoid of limitations. Firstly, despite receiving valuable feedback from a substantial number of urologists, the survey also encountered a consistent rate of non-responders. Furthermore, while we made efforts to involve a diverse array of urologists and facilities from across Italy, it is important to note that our sample may not fully represent all perspectives in the field. At the same time, the current study is the first of its kind, offering a comprehensive overview from 442 respondents with significant insights into contemporary clinical urological practices in Italy.

This extensive snapshot analyses both positive and challenging aspects of clinical practice, showing a widespread adoption of off-label therapies, primarily driven by economic constraints. This highlights a critical practical challenge: health policy revisions, including adjusted reimbursement strategies or cost-sharing models, may facilitate broader guideline adherence, ultimately improving patient outcomes.

Declarations

Ethical approval and consent for participate: *Not applicable.*

Consent for publication: *No conflicts of interest.*

Availability of data and material: *Data reported in this article are available from the corresponding author on reasonable request.*

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Conclusions

In conclusion, congenital or acquired penile curvature significantly impacts sexual function and overall well-being (31). While surgical intervention is essential for congenital cases, managing PD presents a complex challenge requiring further research for effective solutions. This issue is gaining prominence due to increased disease awareness and the growth of andrological outpatient prevention efforts. Through this extensive survey, we have highlighted both the positive and challenging aspects of clinical practices in Italy, particularly in comparison to the current guidelines.

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