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To cite this article: Anne-Marie Elbe & Marie Overbye (2015): Providing Support for Athletes With Negative Experiences During Urine Doping Controls, Journal of Sport Psychology in Action, DOI: [10.1080/21520704.2015.1072120](https://doi.org/10.1080/21520704.2015.1072120)

To link to this article: <http://dx.doi.org/10.1080/21520704.2015.1072120>



Published online: 22 Oct 2015.



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Providing Support for Athletes With Negative Experiences During Urine Doping Controls

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This article outlines the challenges and negative experiences athletes encounter during urine doping controls and how they can be dealt with. Negative experiences can be caused by physiological (e.g., inability to urinate) and psychological (e.g., feelings of embarrassment) factors relating to the control as well as to the way in which the doping control officer (DCO) conducts the procedure. Negative experiences can lead to short- and long-term effects on athletes' well-being and potentially also performance. The article outlines a number of strategies that can be applied to minimize negative experiences of urine doping controls. Furthermore, recommendations for how policy regarding urine doping tests could be changed are given.

KEYWORDS *paruresis, recovery, urination difficulties, urine marker*

Doping controls are a key component of WADA's fight against doping to detect and deter doping in sport. Elite athletes are obliged to attend doping tests at any time and any place without prior notice. Although, the number of blood tests has been increasing and the athlete biological passport programme has been expanded in recent years (WADA, 2013), the most common procedure for detecting the consumption of prohibited substances is the urine doping control (WADA, 2012). The advantage of urine doping controls is that many substances can be more easily identified in urine than

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in blood, and the collection of urine is also less physiologically invasive and harmful than the collection of a blood sample (Corrigan & Kazlauskas, 2000).

THE URINE DOPING CONTROL PROCEDURE

The collection of urine samples should follow a strict, standardized procedure in accordance to WADA's ISTI—the International Standard for Testing and Investigations (WADA, 2014). The “Urine Sample Collection Guidelines” describe “good practices” for the urine testing procedure (WADA, 2014). The control has to strictly adhere to ISTI in order to prevent athletes from cheating during the control, by for example, delivering urine that is not their own or adding substances to the urine after it has been delivered. This means that prior to the doping control the athlete either has to wash his/her hands thoroughly with water only, or she/ he has to wear suitable (e.g., latex) gloves during the provision of the sample. Afterwards the doping control officer (DCO) instructs the athlete to remove and / or adjust any clothing that might restrict the DCO's clear and unobstructed view of the athlete providing the urine sample. The athlete needs to provide at least 90 ml of urine and the DCO will verify that a suitable volume of urine has been provided while in full view of the athlete. This means that the DCO is required to directly observe the urine sample leaving the athlete's body.

Athletes' Negative Experiences With Urine Doping Controls

Although, a majority of athletes think it is fine that they are tested for doping (Elbe & Overbye, 2014; Overbye, 2013), several recent studies have shown that numerous athletes have negative experiences with regard to providing urine during a urine doping control (Elbe & Overbye, 2014; Overbye, 2013; Peters, Postler, & Oberhoffer, 2013; Strahler & Elbe, 2007). These negative experiences can be caused by how the actual procedure is conducted by the DCO, physiological factors (e.g., the inability to urinate) and psychological factors (e.g., feelings of embarrassment). The negative experiences can also be caused by a combination of several factors (e.g., being dehydrated can lead to an inability to urinate which then causes the athlete to experience the control as stressful).

Peters et al. (2013) surveyed German elite athletes and found that almost a quarter of them had experienced problems during doping controls of which the most frequently mentioned ones related to how the DCO conducted the procedure. Many athletes felt they were put under time pressure, that procedural mistakes were made, and that there were language barriers between them and the DCO. An example, which illustrated how inappropriate behavior of a DCO negatively impacted an athlete's experience of the control, was given by the Luxembourgian elite triathlete, Elizabeth May.

During a urine doping control procedure performed after a World Cup race in Japan in 2011, she had a particularly unpleasant experience:

There I am sitting naked from neck to knees. This is still not good enough. She comes close to me while I am naked, grabs my elbows and pulls my arms out without explaining why. Her face is 10 cm away from mine while I am completely naked, sitting on the toilet After she has finished doing whatever it is she wants me to do with my arms and my t-shirt, I provide the sample, while she is bending over me maybe 30 cm from my face. I was able to provide the sample but in my head it was screeching about what I just experienced.

(Translated from Nielsen, 2011)

The reasons for the inability to urinate during a doping control are manifold and are of both a physiological and psychological nature. *Physiological* causes are, for example, that the athlete has just been to the toilet or is too dehydrated from sport and/or from having to lose weight prior to a competition. *Psychological* causes refer to reasons like the athlete being too embarrassed to urinate under supervision, which was also mentioned as a major concern in the Peters et al. (2013) study. Studies conducted with both DCOs (Strahler & Elbe, 2007) as well as athletes (Strahler & Elbe, 2009) on questions related to *psychological* reasons for why athletes cannot urinate during a control (e.g., cannot relax, cannot urinate when others are watching) indicate that factors like gender, age, number of previous doping controls and whether the control is being performed at home, at training or after a competition have no influence on the phenomenon. Elbe and Brand (2014) further identified that especially those athletes showing low oppositional potential (low reactance) and wanting to conform to the doping control procedure were those experiencing the most difficulties during testing.

With regard to physiological factors causing negative experiences, a study among 400 Danish elite athletes showed that one third sometimes had difficulty urinating and thus felt that this challenge/inability had psychological implications; namely, that it led to feelings of stress (Elbe & Overbye, 2014). In addition, the Danish study showed that a considerable number of athletes associated the testing procedure with other kinds of negative experiences or emotions. About one out of seven Danish elite athletes, who had been tested, felt their personal integrity was violated when someone was watching them urinate; and slightly fewer sometimes felt under suspicion during doping tests. Moreover, about half of the athletes mentioned the fear of being tested positive despite not intentionally having taken forbidden substances. Significantly more female and younger athletes reported this fear (Elbe & Overbye, 2014). Lastly, one quarter of athletes with previous experience of testing (Elbe & Overbye, 2014) and one fifth of athletes with

whereabouts obligation (Overbye & Wagner, 2014) felt that a doping control officer appearing at their door to test them was an intrusion on their privacy. This suggests that the time and place for testing might impact an athlete's emotions during the testing procedure.

Consequences of Negative Experiences During Urine Doping Controls

Negative experiences during a doping control may lead to a number of short and long term consequences for an athlete. A short term consequence can, for example, be that an athlete's time schedule is impacted by a doping control that took too long. Some athletes report delays in urinating of up to three hours or more (Elbe, Schlegel, & Brand, 2012). A while ago the media were filled with the story about FC Barcelona's star player Gerard Pique who missed his plane after a game because he could not urinate during a doping control (Sharma, 2015). These short term delays can negatively affect the athlete's recovery level. Recovery entails psychological, social, and physiological processes (Kellmann, 2002). A doping control that lasts much longer than anticipated due to an athlete's inability to urinate can lead to an imbalance in an athlete's stress and recovery levels (Elbe et al., 2012).

A prolonged doping control, however, might not only manifest itself in a relatively short term phase of under-recovery, a phenomenon of physical or psychological tiredness (Budgett, 1998), but can also have more long term psychological implications. Stress and recovery impact the well-being of an athlete and his or her reaction to subsequent stressors (Kallus, 1992). One or more stressful doping controls can override an athlete's ability to cope with the situation and can leave his or her mind with an aversive blueprint of the situation (Boschen, 2008). During the next doping control, memories of this situation can be triggered by recurring situational cues and elicit unfavourable, physiological and psychological reactions such as anxiety, anger, an elevated activation of the central and autonomous nervous system, hormonal responses, changes in immune function, and behavioral changes. According to Kellmann (2002) this would no longer describe a short term state of under-recovery but could affect the athlete over an entire competitive season or even longer.

Another more long term effect of negative experiences during controls is that athletes are more likely to express a lack of confidence about their athletic competence (Elbe et al., 2012). Confidence about one's athletic competence is a key factor contributing to being able to perform at one's peak and therefore negative experiences during doping controls can potentially keep an athlete from achieving peak performance.

A further negative aspect of urine doping controls that can have a long term psychological impact on athletes' well-being is the possibility that a problematic doping control triggers paruresis. Paruresis, also known as shy

bladder syndrome, is the clinical diagnosis of a general state of psychogenic urine retention involving the inability to urinate when other people are around (Williams & Degenhardt, 1954). Triggers for paruretic behavior are (a) the presence of other people, (b) a perceived threat to privacy, and (c) the experience of intense emotions such as anxiety or anger (Soifer, Himle, & Walsh, 2010). Soifer, Himle, and Walsh (2010) pointed out that paruretics often report the onset of their problem as being caused by one unpleasant event while trying to urinate either in a public restroom or during a drug or medical test. A urine doping control therefore can potentially be the trigger for the development of paruresis. For athletes suffering from paruresis it is challenging to keep up their athletic career as they will always encounter situations during which they will need to urinate during the presence of other people (e.g., in a public restroom, while traveling, etc.). The long term impact of an unpleasant doping control which leads to paruresis could therefore, in the worst case, lead to a premature career termination for the affected athlete.

To sum up, most athletes are positive towards doping testing in elite sport, however, despite their support of drug testing, many have negative experiences during the control procedure. The key focus, therefore, is to provide recommendations on how to reduce these negative impacts of the testing procedure on the athletes.

RECOMMENDATION FOR ATHLETES ON HOW TO DEAL WITH PROBLEMATIC URINE DOPING CONTROLS

There are a number of recommendations that can be given in order to reduce the negative effects related to urine controls. These recommendations can most easily be delivered by the coach who works with the athlete on a daily basis and who is also likely to be near the athlete during the doping control. However, we only recommend that coaches take over this role if they have been properly educated about the topic. An obstacle here is that coaches may lack basic knowledge about anti-doping issues. As Backhouse and Mc Kenna (2012) point out, many coaches lack education in many anti-doping aspects. Furthermore, Mazanov, Backhouse, Connor, Hemphill, and Quirk (2014) found that "sports trainers demonstrated gaps in their knowledge of sample collection procedures, particularly in relation to sample provision and athletes rights and responsibilities following notification," (p. 853). Therefore, coaches need to be encouraged to seek information so that they can assist their athletes. Also, anti-doping authorities and sports organisations should ensure appropriate anti-doping education of coaches with regards to the testing procedure and the challenges athletes may experience. Sport psychologists could also be involved in the coach education. We recommend that, in particular, coaches of younger athletes experiencing their first

doping control are properly educated. Minors are permitted to have a third party present during the doping control and this is likely to be the coach. If coaches are not sufficiently educated and / or the problem is more severe, we recommend consulting sport psychological services.

In order to minimize negative experiences related to the way the actual control is conducted, it can be recommended that athletes familiarize themselves with the doping control procedure and with the fact that they will need to urinate half naked in front of a DCO of the same sex. It can help if they are informed that this procedure often causes delays in urination and that this delay is common. Also informing athletes that they do not need to provide the sample in a specific time frame can alleviate the time pressure some athletes' experience. Being knowledgeable about the testing procedure can make athletes feel empowered and less afraid of procedural mistakes. Furthermore, it is especially important that very young athletes are provided with very detailed information about what to expect during the first doping control in order to prevent negative experiences, or in the worst case, the onset of paruresis, as a result of a very unpleasant first doping control. WADA, for example, has published a leaflet on the procedure in several languages (WADA, 2015), that can be recommended to athletes.

Athletes who are afraid of a positive doping test can be supported by being reminded to always have all of their medicines checked against the WADA list. Moreover, it is important to advise the athletes to be especially careful when taking any type of nutritional supplements as these are frequently contaminated.

With regard to the inability to urinate due to dehydration or just having been to the toilet it can be recommended that athletes consume ample amounts of fluids before providing the sample and make them aware that they are not under time pressure. These simple interventions can alleviate negative experiences related to the actual procedure and caused by physiological factors.

Furthermore, especially coaches should also be aware that problematic urine doping controls can have a negative impact on some athletes' recovery levels and can also impact future athletic performance (Elbe et al., 2012). This needs to be taken into consideration when designing daily training schedules, especially when training follows a problematic doping control. If the entourage notices that athletes regularly encounter problems during urine doping controls it should consider referring athletes to a sport psychologist.

Interventions with regard to psychological factors are more complex and might require support by a sport psychologist. A first step sport psychologists can take is to provide athletes with information such as that many athletes are affected by problems during doping controls and especially that those athletes who want to conform to the system are affected most (Elbe & Brand, 2014). It can comfort athletes if they know that more than every third athlete sometimes is confronted with urination difficulties during controls (Elbe &

Overbye, 2014) and that it is not perceived as an indication of having committed an anti-doping rule violation. Athletes who cannot urinate during a control because it is too embarrassing can be advised to learn and apply relaxation techniques. Sport psychologists can teach athletes relaxation techniques to relax both their mind and their body during the control. There are different relaxation techniques that might be effective, for example, breathing and progressive muscle relaxation. However, it needs to be stated that learning to relax in a situation in which you need to urinate while someone else is staring at your genitals is not an easy task.

Cognitive-behavioral therapy (CBT) is also a feasible clinical intervention. A central technique from CBT that may prove valuable is combining psychotherapeutic dialogue with in vivo desensitization—an exposure-based strategy—to reach the best result. For the cognitive part, recent research of Boschen (2008) on CBT shows that first and foremost, unrealistic beliefs about negative evaluation have to be resolved. In CBT, irrational patterns of thinking are discussed, more adaptive cognitions are shaped (e.g., “I do not need to be in a hurry”; “it is the doping control officers’ job to wait as long as it takes”), and strategies are discussed to deal with the problem or even to solve it. For the behavioral part, the affected individual has to practice the situation with altering difficulty (e.g., starting alone and ending up urinating under supervision).

Other important tasks for sport psychologists could be to educate coaches on the matter and to speak up for athletes in cases that mental harm is being caused. As mentioned further up, coaches often lack sufficient education about anti-doping regulations. If, however, they were properly educated they could support their athletes in dealing with urine doping controls. This is especially important for coaches of young athletes since they are permitted to be present during the doping control and can positively support the athlete if they are knowledgeable about the procedure. Furthermore, sport psychologists can take an active role in advocating policy changes outlined further down in order to reduce mental harm (e.g., the onset of paruresis) for athletes.

Lastly, it needs to be stated, that some athletes might have experienced very traumatic doping controls which have led to long term psychological problems (e.g., paruresis). This could result in them not wanting / being able to continue their athletic career. In this case, the sport psychologist can assist athletes in transitioning out of elite sports and in career termination (Alfermann & Stambulova, 2007).

POLICY RECOMMENDATIONS FOR HOW TO IMPROVE THE URINE DOPING CONTROL PROCEDURE

Providing athletes with information about the doping control and helping them to cope better with negative experiences during a urine doping control

is one thing. However, it is also necessary to make policy and training recommendations for conducting the actual doping controls in order to reduce its negative impact. This pertains both to the individual DCOs as well as to the sample collection procedure itself.

DCOs need to be informed about the fact that the way they perform the control can have negative impact on the athletes. As mentioned in the Peters et al. (2013) study, athletes feel time pressured by the DCOs and also encounter procedural mistakes and language barriers. Making DCOs aware that they should not pressure the athletes can be a first step to minimize negative effects. Furthermore, DCOs need to be educated about the fact that the first doping control in an athlete's career might be more crucial to him or her than subsequent ones. The novelty of the situation and the unreadiness of the (young) athletes to urinate under supervision could be the trigger for many problems later on. For most paruretics the age of onset is between 12 and 15 years of age (Malouff & Lanyon, 1985), an age at which young elite athletes may encounter their first doping control. Zgourides (1987) believes that this initial failure to urinate (e.g., during a urine doping control), produces subsequent worrying about failing again and that this underlies the perseveration of symptoms. DCOs therefore need to be sensitized towards this issue and need to be educated about the fact that an unsuccessful doping control can cause stress and negative emotions for athletes and, in the worst case, be a trigger for paruresis. They therefore should always be advised to ask if it is an athlete's first urine doping control. If this is the case they should take utmost care prior to and during sample collection.

However, not only young athletes experiencing their first control but also older, experienced athletes can find the situation of having to urinate in front of a stranger intimidating, embarrassing and stressful. DCOs therefore should have knowledge about the reasons for urination difficulties and should strive to affect the athlete as little as possible. This can, for example, be done by increasing the physical distance to the athlete and by keeping respectful, non-judgmental communication with regards to the adjustment of clothing etc. These points, in addition to ensuring the athletes' rights during a control, may make the difference between a good and bad experience for an athlete. Lastly, the DCO's interaction with the athlete might play a role for the athlete's perception of the legitimacy of rules, hence is likely to impact compliancy with the rules. As Donovan, Egger, Kapernick, and Mendoza (2002) point out interactional justice is an important factor for compliance with rules and refers to the "extent to which interpersonal interactions with those administering and enforcing the law are seen to be polite and respectful, and competent and professional" (p. 277).

The most promising intervention to alleviate problems athletes experience in connection with having to urinate under supervision and with the feelings of embarrassment, infringement of privacy and stress associated with this procedure is the use of a urine marker (Gauchel, Huppertz, Feiertag, &

Keller, 2003; Huppertz et al., 2004), which allows athletes to urinate unsupervised. Urine markers are widely used in drug testing of pilots and convicts, for example, and are taken orally prior to providing the urine sample. Because there are more than 1,000 different markers, individual markers can be easily discriminated. 30 minutes after having swallowed the marker, athletes are allowed to urinate without supervision. Urine samples are traced to the athlete by determining the presence of marker substances, previously ingested. Analyses conducted with 90 elite athletes' urine samples at the Olympic Analytical Laboratory at UCLA show that the urine marker does not interfere with the doping analysis and that this new method finds wide acceptance from athletes who tested the new method (Elbe et al., in press). However, at the moment the urine marker is not an intervention method available to athletes. In order for the marker to be available for athletes during doping controls the urine marker needs approval by WADA, and once this happens, the official protocol needs to be adjusted.

CONCLUSION

In conclusion, the way in which the doping control procedure is conducted and physiological and psychological factors can lead to athletes having negative experiences during a doping control. These negative experiences can have rather short term but also very severe long term repercussions for some elite athletes. This article described a number of interventions that can be applied to minimize the negative impact of doping controls. In addition, policy and training recommendations with regard to DCOs and the actual testing procedure (e.g., introduction of the urine marker) were given. Although having to urinate half-naked in front of a DCO is perceived by some athletes as a violation of their personal integrity or humiliation, the measures described in this article might make the impact of this procedure less negative for those athletes who experience difficulties with urine doping controls.

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