



Analysis of the role and challenges of sport federations in doping prevention in the UK

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Executive summary

Purpose – The purpose of this research was to examine the role, initiatives and challenges facing sport federations in anti-doping education in the UK.

Context and Rationale – Doping in sport has become a public health problem that not only concerns elite athletes, but also recreational athletes and young people. The World Anti-Doping Agency has developed international sports policies to fight that social phenomenon. These policies are implemented and monitored at national level by National Anti-Doping Organisations which should also cooperate with national sport federations. Within the United Kingdom, UK Anti-Doping aims to promote a culture of clean sport by ensuring sport bodies, such as sport federations, are compliant with international anti-doping policies written in the World Anti-Doping Code and that includes promoting and supporting anti-doping education programmes. However, there is no evidence yet regarding the extent of anti-doping education activities implemented by sport federations.

Background – The World Anti-Doping Agency through National Anti-Doping Organisations can be seen as a standard setting organisation which diffuses anti-doping policies and recommends the adoption of good practices in the fight against doping. These policies and good practices aim to be implemented at national level by national sporting organisations such as sport federations. The theoretical approaches used in this study are those of diffusion and implementation theories. UK Anti-Doping diffuse good practices in terms of education that sport federations at national and regional levels in the UK are recommended to implement. For that to happen, and in accordance with the aforementioned theories, implementers need to recognise the merit in these practices that need to be communicated properly to them with clear objectives to achieve, and they need to possess sufficient resources and capacity to implement the practices.

Method – Interviews with representatives of twelve sport federations in the UK at national and regional levels have been carried out and preliminary findings have been discussed with UK Anti-Doping. Content analysis of the interview transcripts into predefined themes has been achieved with the qualitative data analysis software NVIVO 10.

Findings

The main concern is inadvertent doping - Even though sport federations recognised doping is a risk that has to be managed, they identified that the risk of intentional doping cases for their sport in the UK is low. The main concern shared by participants is actually inadvertent doping. According to some participants, the purpose of anti-doping education is mainly to avoid athletes making a mistake by warning them any substances or supplements they take might be contaminated. Ethical deterrent (e.g. act morally) is also reinforced during education activities, but participants argued that education would have no impact if athletes decide to consciously take illicit substances. Anti-doping education requires a lot of resources in order to ensure that athletes stay clean which raises the question of its impact on athletes with less moral background.

Role - Sport federations are aware of their role and responsibilities to educate athletes and ensuring they have the correct attitude towards the issue of doping. However, it is the athletes' responsibility to check whatever they are taking. The responsibility of regional sport federations in anti-doping education does not seem entirely clear, particularly when athletes move up to the GB level.

Focus on funded athletes – Sport federations deliver anti-doping education activities to funded athletes within the academy level and that includes young athletes. They also educate and inform support staff such as coaches and parents, but these activities do not appear to be consistent across sports. Although the World Anti-Doping Code recommends that recreational members of sport federations should receive the benefit of anti-doping information and education, sports federations and UKAD do not deem it feasible to educate them. This raises an issue in terms of international anti-doping policies being applied by countries as those are judged unclear by implementers.

Inconsistent delivery of anti-doping education - Sport federations have monitoring systems in place to check athletes who undertake anti-doping education activities, but the information is not reported consistently back to UKAD. Furthermore, there is a lack of objectives and evaluation on these activities and their outcome. Anti-doping education is deemed to be effective by participants as awareness and knowledge have improved although it is difficult to measure. The support received by UK Anti-Doping is deemed satisfactory by most sport federations but some regret it only focusses on high risk and funded sports. Not all sport federations are fully equipped to deliver anti-doping education and thus the access to UKAD support is important, but not all feel they benefit. This leads to differences in the delivery of anti-doping education across sports according to some participants.

Lack of interest in anti-doping – Athletes and support staff seem disinterested by anti-doping. The message needs to be more relevant and linked to athletes' interest. Athletes might disregard anti-doping education in favour of other aspects of their development / career that have a higher priority.

Recommendations

Clearer responsibilities for British and regional sport federations should be established as to the types of anti-doping education activities they need to deliver and to whom in order to enhance the consistency of anti-doping education delivery. The message should be sport specific, interactive and address athletes and support staff. It should be delivered at the right time such as training camps and may include dummy tests. Different channels may be used including online delivery. Good practices in anti-doping education implemented by sport federations should be shared between them.

Objectives in anti-doping education delivery at each sport federation level should be established and programmes should be evaluated and monitored to get a sense of direction as to what needs to be delivered, and how successful it has been. Reporting to relevant external bodies such as UKAD should be regularly undertaken.

Policy reforms could be made in order that funding agencies recognise the key role of sport federations in anti-doping education which can be associated to funding allocated to their anti-doping education activities. A social drug policy could be created to handle athletes caught taking recreational drugs differently and provide them with appropriate support.

1. Research context

The use of drugs to increase sport performance has long been a concern for sports organisations and the Olympic movement. Doping in sport has become a public health problem (Moller, McNamee & Dimeo, 2009) that not only concerns elite athletes, but also recreational athletes and young people. The World Anti-Doping Agency (WADA) was created in 1999 to fight that social phenomenon through the coordination and worldwide harmonisation of the fight against doping at all levels by developing international sports policies written in the World Anti-Doping Code (WADA Code, WADA, 2015). These policies are implemented and monitored at national level by National Anti-Doping Organisations (NADOs) which work together with sport bodies in their country, such as sport federations, to promote doping-free sport.

Sport federations vouch for the application of the rules and regulations within their sport, including preventing cheating through doping. These sport federations are independent organisations that can be recognised and funded by national public agencies. Sport federations are typically governed by a Board of volunteers who is accountable to their club members. They vary in size and in addition to public funding; they can generate revenues from members' affiliation and sponsoring to cover expenses related to their administration, paid staff and activities. Sport Federations are key organisations in the fight against doping and are required to comply with the WADA Code (WADA, 2015). The role of national sport federations is partially recognised in the WADA Code as they are required to report any information on potential Anti-Doping rule violations and to cooperate with relevant anti-doping organisations. National sport federations are also required to conduct anti-doping education in coordination with their NADO (WADA, 2015, art. 20.3.12).

In the United Kingdom, the organisation in charge of the application of the WADA Code published by WADA is UK Anti-Doping (UKAD). UKAD was created in December 2009 and is a Non-Departmental Public Body (<http://www.ukad.org.uk/what-we-do> accessed 01/05/2015). It ensures sport bodies in the UK, such as sport federations, are compliant with the WADA Code. In accordance with the WADA Code, UKAD has published a UK National Anti-Doping Policy which sets out policy objectives as well as its responsibilities and those of Sports Councils and sport federations in the UK in the field of doping in sport (UKAD, 2009). UKAD is responsible for testing athletes in the UK (in- and out-competition testing), managing test results and their reporting to relevant organisations, sanctioning athletes or support personnel who have committed an Anti-Doping rule violation, and promoting anti-doping education. Education is recognised by UKAD to play a key role in the fight against doping (<http://www.ukad.org.uk/what-we-do/education> accessed 01/05/2015). UKAD aims to “plan,

implement, evaluate and monitor information and education programmes for doping-free sport” (UKAD, 2009, p.6), and thus to promote a culture of clean sport by working with sport federations.

Within the UK, there are different levels of sport federations, British and regional sport federations, that promote their sport in their country or region (i.e. Wales, England, Scotland and Northern Ireland). These sport federations can be recognised by national sport agencies such as UK Sport and/or Home Country Sports Councils such as Sport Wales, Sport England, sportscotland and Sport Northern Ireland. According to the UK National Anti-Doping Policy (UKAD, 2009), each sport federation in the UK shall adopt the code-compliant policies regarding testing, results management, sanction and appeal, and *“take all practical steps to educate its athletes and athlete support personnel on ethical values in sport”* (UKAD , 2009, p.16). The UK National Anti-Doping Policy acknowledges that British sport federations might take responsibility for compliance with the policy on behalf of their regional sport federations (e.g. English and Scottish), but points out that they should ensure accountability at each level.

2. Background

NADOs are key organisations in the fight against doping as they apply WADA regulations and liaise with national sport federations. The relation between NADOs and sport federations can be looked at from the point of view of diffusion theory (Rogers, 2003) which is the spread of standards or policies from the centre to the periphery and aims to create uniformity. According to diffusion theory, standard-setting organisations (e.g. WADA through NADOs) develop and promulgate standards or policies to organisations (e.g. National sport federations) which act independently and are free to choose to implement them (Meyer, 1996; Strang & Meyer, 1993). NADOs diffuse anti-doping policies to sport federations and recommend the adoption of good practices in term of anti-doping. Policies' attributes (i.e. characteristics of the policies such as their relative advantage compared to others, their compatibility with the values and past experience of the adopter and their level of complexity) and the way they are diffused through communication channels have a major influence on the decision to adopt and implement them (Rogers, 2003; Meyer, Johnson & Ethington, 1997). Implementers (e.g. sport federations) must gain knowledge of these policies, be persuaded as to their merits, decide to adopt them, put them into practice, and confirm (or reaffirm) their decision over time.

The implementation decision has been analysed through implementation theory. Building on Pressman and Wildavsky's (1973) work, van Meter and van Horn (1975) develop a model of policy implementation that underlines six variables: policy objectives, allocation of resources, interorganisational communication, characteristics of implementing bodies, economic and political conditions, and disposition of implementers. This model is regarded as relevant for the analysis of sport policies in general by May, Harris and Collins (2012) as it highlights highly relevant variables and their interrelationships, and above all it reflects the reality of the WADA's diffusion strategy of anti-doping policies, whilst also considering the perspectives of national (and regional) anti-doping implementers. Conditions for policy implementation have also been identified by Hogwood and Gunn (1984) such as low external constraints, sufficient time and resources available, clear logic of the policy being implemented in term of cause and effect, clear objectives and tasks required for implementation, proper communication and coordination, minimal dependency and requirement of compliance.

Despite the creation of WADA to harmonise the fight against doping in sport, concerns exist regarding doping prevention at national level (Hanstad, Skille & Loland, 2010; Houlihan & Garcia, 2012). Resistance, lack of commitment, inequalities between sports and confusion regarding the role of anti-doping agencies worldwide have been identified as global implementation issues (WADA,

2013). Challenges exist in the diffusion and implementation of anti-doping education at national level. NADOs rely on national sport federations to implement anti-doping education programmes that can reach their members. However, the level of exposure and effectiveness of anti-doping educational activities is questionable. Research on Scottish athletes (Dimeo et al., 2013) showed that a majority of them have limited knowledge of anti-doping issues. Another study from Allen et al. (2014) showed that coaches deemed education was mainly directed to athletes and most give low priority to anti-doping education. National sport federations have scarce resources and may not see anti-doping as a priority in their sport. They might disregard their designated role in doping prevention leading to a potential risk of increasing doping behaviour among elite and amateur athletes, including young people. The close contacts sport federations have with athletes of their sport at the very first stage of their development are critical to the fight against doping in sport and its prevention. However, there is no previous research regarding the extent of anti-doping education activities implemented by sport federations and their actual role in doping prevention. Therefore, there is a need to better understand sport federations' role and challenges in anti-doping education in order to improve doping prevention at national level and reduce the risk of doping behaviour.

3. Research aims

3.1. Purpose of the research

The purpose of this research is to examine the role of sport federations in doping prevention, the extent to which they implement anti-doping education activities at national level, and the challenges they face in implementing anti-doping education programmes.

3.2. Research questions

The following research questions will be addressed:

- What is the actual role and responsibilities of national sport federations in anti-doping education?
- What anti-doping education activities are developed by national sport federations?
- What are the barriers and challenges national sport federations face to implement anti-doping education programmes?
- How can doping prevention be improved at national level through sport federations?

4. Method

4.1 Research design

The methods used are semi-structured interviews which can facilitate better understanding of the designated vs actual role of national sport federations in the fight against doping, the associated challenges, and how (and to what extent) sport federations implement anti-doping policies to prevent doping behaviour.

4.2. Ethical approval and confidentiality

The research received approval from the School of Sport Ethics Committee at the University of Stirling. Respondents were informed that their anonymity would be guaranteed and that the data would be managed in accordance with the Data Protection Act (1998).

The only organisation named from the interviews is UK Anti-Doping which has agreed to be mentioned following verification that their quotes and views were reflective of the discussion that has occurred with the researcher.

4.3. Participants

Semi-structured interviews with twelve representatives of UK and regional (England and Scotland) sport federations have been carried out between October 2014 and January 2015. Participants were anti-doping officers, chairs or performance directors of sport federations. These sport federations represent two levels of the UK structure and are from different sizes: four British, three English and five Scottish. Three sport federations represent team sports and nine individual sports; nine sport federations represent Olympic sports and three non-Olympic sports.

Furthermore, a semi-structured interview with a representative from UK Anti-Doping (i.e. a senior officer) has been carried out in January 2015 in order to interpret preliminary results in the broader UK and international contexts.

4.4. Data collection

Contact with sport federations' representatives was established in September 2014 and a date and time of meeting agreed. Interviews were recorded with the agreement of interviewees and anonymity was guaranteed. Interviews focused on the role, actions and challenges of sport federations regarding doping prevention at national level. In addition to interviews, documentary evidence on anti-doping strategies has been collected from sport federations' policy plans.

The interview with the representative from UKAD focussed on similar topics as the interviews with sport federations, but in addition, preliminary results from the sport federations' interviews were shared and discussed, while the anonymity of sport federations which took part was guaranteed.

Interviews lasted between 34 and 91 minutes, while the interview with the UKAD representative lasted 63 minutes.

Figure 1 summarises the key themes that were discussed during the interviews and these form the structure of the interview guide.

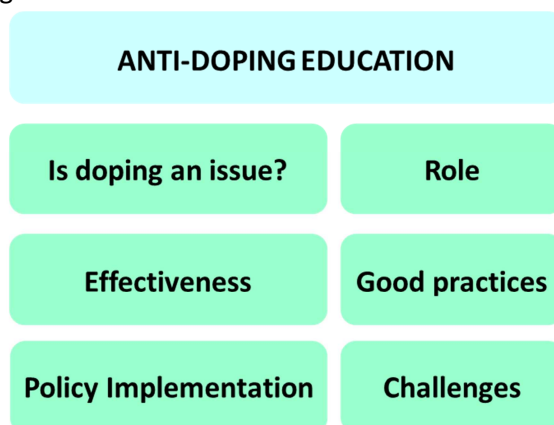


Figure 1: Themes investigated during semi-structured interviews

4.5. Interview guide

The interview guide with sport federations' representative is available in appendix B. It has been constructed to focus on six main areas of investigation in order to answer the research aim and objectives:

- Roles and responsibilities of sport federations with regard to anti-doping education
- Anti-doping culture in the sport – Is doping an issue?
- Activities in anti-doping education – Good practices
- Implementation of anti-doping programmes – Decision/communication/objectives/support
- Effectiveness of anti-doping education
- Challenges in anti-doping education

4.6. Data analysis

Interviews' recordings were transcribed verbatim, and analysis of the interviews transcripts was undertaken using the qualitative data analysis software NVivo 10. A thematic framework was constructed of eight different themes (i.e. role, culture, implementation, activities, support, GB structure, compliance, challenges) which includes 47 sub-themes. Interview transcripts were coded into these sub-themes.

5. Findings

Findings are presented in a comprehensive way and supported by quotes from the interviews. Additional quotes supporting arguments are presented in appendix C.

5.1. Is doping an issue?

Doping is perceived as important and potentially an issue in sport, but doping is not perceived as an issue for most interviewees in their sport and in the UK. They perceive it as a low risk. The main reason given was that doping in some sports has not historically been recognised as an issue or that there are no cases of intentional doping in their sport in the UK. Instead, the general concern shared by all participants is inadvertent doping such as the use of recreational drugs and the misuse of supplements. Education should hence make awareness of the illegitimacy of that type of drugs in sport and raise the issue of contaminated supplements.

“It’s lower risk they have for cheating but we think there’s more risk than there used to be for making a mistake.” (Participant 10)

UKAD view

UKAD recognises that doping is a risk each and *“every sport has to manage.”*

Sport federations are able to reduce the risk associated with doping by effectively engaging with UKAD and taking responsibility for managing the delivery of sport specific education programmes within their sport.

UKAD considers that if sport federations *“manage it [the risk associated with doping], then they might be able to say it’s a low risk; but it won’t be a low risk unless it’s deliberately managed”*, and within low risk sports, there is a risk at individual level. Sport federations have to take ownership of this risk and employ appropriate strategies and interventions to manage it.

Two participants regret however that athletes who have been caught taking recreational drugs are not treated differently. They call for the creation of a *“separate illicit drugs policy and programme”* which would address the vast majority of athletes who make a mistake by taking recreational drugs. These athletes would be provided with adequate support and treatment instead of being treated as cheats (*Participants 6 and 11*). However, these athletes would need to receive proper sanctions according to their violations otherwise this new policy would be misused.

“the idea that these people [who take social drugs] are cheating is totally ridiculous and they need to be handled differently.” (Participant 11)

“the main reason for a policy like this isn’t to ban people because they’re using cocaine or whatever, it’s primarily to identify someone who’s got a real problem who may need treatment and help.” (Participant 6)

The use of supplements is a major concern according to participants. They are trendy and athletes might not know what they are taking. It is particularly a concern when athletes are travelling abroad as there is a risk of consuming a contaminated supplement. Sport federations educate on the use of supplements, but they cannot be specific. The message to athletes is to check whatever they take. There are providers that give guarantees on clean supplements, and there are federations that have links to manufacturers or screening organisations.

“The more recent concern is accidental doping through the use of supplements and what we need to do there is to educate people so that they avoid making mistakes out of ignorance. (Participant 10)

UKAD view

UKAD considers that the substance availability and normalisation of use have increased risks of doping violations. Particularly, the use of supplements is recognised as problematic as it normalises taking substances and these supplements can also be potentially contaminated.

“the increasing normalisation of the use of supplements across the whole population and the [brand] sponsorship agreements that federations and clubs get involved in where [...] not all of those brands are using the batch testing system.” are two types of risk.

UKAD believes research has shown that sustained supplement use can be a predictive factor if an athlete is faced with a doping decision and may lead to an increased likelihood of experimentation with banned substances.

An athlete suspended for doping violations is recognised as a risk to the governing body and its funders according to participants. Even if it is the athlete’s responsibility, the sport federation’s reputation would suffer. Indeed, given the importance of media representation, doping is seen as “a reputational risk” (Participant 10), which would affect the image of the organisation, of the sport and its funding.

“somebody doping is going to create a significant risk to us in terms of our organisation, sponsors, that type of thing” (Participant 9)

UKAD view

UKAD shares sport federations’ concerns about the consequence of positive case of doping would have towards funders.

“UK Sport and the Lottery are investing in medals. It is our job to protect those medals and ensure athletes are winning them cleanly”

5.2. Sport federations' role in anti-doping education

Role and Responsibilities

Most sport federations do recognise their role and responsibility to educate athletes and inform them about their responsibilities. They need to ensure athletes have the correct attitude and values towards the issue of doping. However, sport federations recognise it is the players' responsibility. Sport federations have a responsibility to teach self-management regarding anti-doping and they are not liable for individuals' choice.

"It is our responsibility [...] to ensure that people not only have the correct information but have the correct education and attitude towards the issue [of doping]." (Participant 4)

A few participants note that sport federations have the responsibility to make the message specific to their sport whereas UKAD's message seems broader and less specific. However, some sport federations have other priorities and limited resources to invest in education. Therefore, they would not be able to address a sport specific message. Furthermore, one respondent suggested that the responsibility for regional sport federations to deliver anti-doping programmes is not clear, particularly for athletes who are moving to the GB level.

"[Anti-doping education is] not seen as a priority and because we are sort of a small to medium sized sport, we don't get huge amounts of funding. So any funding that we do get, it's already assigned. So the stuff that we do, we do it with zero budget." (Participant 5)

UKAD view

UKAD's "first objective is to protect clean athletes in the UK. Trying to ensure no UK athlete makes a poor decision or mistake in relation to inadvertent doping is a key part of this."

UKAD wants to "make sure that every part of what we call the sporting landscape has an element of anti-doping or clean sport education embedded within in."

UKAD declares that its role is to provide support to their partners, "particularly national federations, to enable them to educate their members."

Target groups

Anti-doping activities delivered by sport federations mostly target funded athletes and/or young athletes who are, for instance, within the academy level. Some sport federations do not particularly deliver anti-doping education to senior or professional athletes as they would assume these athletes should know about anti-doping given they already had previous education. However, one participant stressed that senior athletes might not always know what they are doing in term of anti-doping which raises the question of the effectiveness of anti-doping education, and the need to reiterate

the message and checking what athletes know exactly. It is also noted that sport federations might have less control over senior or professional athletes due to them travelling. Maintaining a level of delivery to the top level is important and is actually reinforced by major games education programmes, but this is not available to every sport.

“we assume wrongly that the seniors know what they’re doing, so we don’t do anything [anti-doping education activities] with them” (Participant 5)

UKAD view

UKAD “work in partnership with the majority of professional sports in the UK, typically developing the responsibility of the delivery of their education to these sports whilst continuing to support them practically with advice and resources. This allows us [UKAD] to concentrate our limited resources on less well developed or funded governing bodies, whilst ensuring a consistent education message is promoted across the board”.

Furthermore, sport federations also target support staff such as coaches, physiotherapists, staff of governing bodies, staff of clubs, and parents. In particular, they declared that educating coaches is very important.

“the real thing for us is about educating the coaches because the coaches will be there longer than the [athletes] in many cases.” (Participant 7)

Sport federations deliver anti-doping education activities to people who might be tested in the future. Early education seems the most important, and consequently it is important to educate parents which not all sport federations do to the same extent.

None of the sport federations deliver anti-doping education activities to recreational members except information on websites. Some sport federations recognise it is important to deliver the message of clean sport across to the wider membership, but they do not have the capacity or resources to do that. Other federations do not see why they should deliver the message at recreational level, given that recreational members will never be tested and have the right to do what they please as long as it is legal. Therefore, education further down the pyramid, i.e. at recreational level, is recognised to be a difficult task as doping is not seen as an issue at that level. However, it is considered problematic given that the new WADA Code (2015) recommends undertaking anti-doping education activities at all levels, including recreational level. A few interviewees mentioned they were thinking about the implementation of such activities in the future.

“It is extremely, extremely difficult to educate further down the pyramid. They don’t see it as an issue. Cheating is not an issue.” (Participant 11)

“I’m going to look at ways of providing very general clean sport messages to the wider game I suppose, recreational game, who obviously are never going to get drug tested but it’s important that the message goes out there.” (Participant 6)

UKAD view

UKAD recognises that individuals who compete at low level (e.g. recreational) are a lower priority although they should have some anti-doping awareness. UKAD recommends that sport federations have information on their website, and communicate with their members via newsletter or posters so their members would know where to look. UKAD states this *“would suffice at that lower recreational level.”*

UKAD does not currently have recreational sport in its strategy but does recognise there is *“an issue of substance abuse that affects a specific population of people engaging with sport at recreational level and some of those wishing to progress up the sporting pathway”* This is an area that UKAD is constantly revisiting to see what can be done, but UKAD is not funded for those activities.

Acknowledging that the WADA Code recommends that all sport members need to be educated, UKAD appreciates it has limited resources and has to prioritise. Therefore, UKAD is unable to provide education across the entirety of each sport’s pathway and therefore must concentrate on those areas of highest risk. As such, whilst UKAD can and does provide information to recreational members, it is unable to provide education to every single member of sport federations.

“we can provide information [to recreational members] and the national federations can provide information but we’re not going to educate every single sporting member.”

It appears that sport federations are well aware of their responsibility in anti-doping education. They are focussing on funded or young athletes, but not all of them are able to deliver education activities at the same level, or consistently to support staff (e.g. coaches and parents). There are differences in terms of resources, capacity and priorities between sport federations which might lead to differences in the delivery of anti-doping education activities between sports, and thus threatened the homogeneity of the system and what athletes and support staff know across sports. Finally, WADA’s requirement to educate recreational members is deemed unrealistic.

5.3. How are anti-doping education programmes implemented?

Decision and Communication

The decision to implement anti-doping education programmes seems to have originated from sport federations themselves as they have recognised there is a potential risk if athletes do not receive proper information. This is done in partnership with UKAD at different levels of support or collaboration.

“our board and our senior management team identified it [doping] as a risk, so it was on our risk register for our organisation, so we saw that as much as any financial risk to the

organisation or anything like that. So therefore it's a risk that needs to be managed and that's where it [education programme] comes from really." (Participant 9)

In term of communicating, some sport federations explained they have privileged relationships with athletes that they build from the time athletes were in the talent pathways and this trust is useful to communicate about anti-doping and when to do it. This can be done through face to face meetings, phone calls, digital communication or during sport events. Each sport federation seems to have its own way to communicate with athletes according to the specificities of the sport.

"Email normally but also using then things like social media, Twitter and things like that as well, so it's out there in that sense. And again we'd be referencing it at championships. I mean, the anti-doping education, it's everywhere." (Participant 2)

Strategy

Five sport federations from the sample have an anti-doping education strategy in place, recommended by UKAD, but at different stages of development. There was a drive from UKAD that each governing body would have such strategy, but few did. Those who have written an education strategy believe it is very useful but it requires a lot of work and it needs to be kept updated. The work required to develop such strategy has put off some sport federations which were originally in favour. According to participant 3, UKAD had realised that it cannot *"demand what work I do on a day to day basis"*. Another participant mentioned UKAD had appreciated it is a lot of work for sport federations and for UKAD themselves as they both would need to monitor the strategy, so UKAD *"dropped the idea"* (participant 11).

"[we were] very keen to have a [...] Anti-Doping education strategy and they [UKAD] were putting a lot of pressure on us to produce one. However, my line manager and my board of directors and CEOs [decided] it wasn't part of my role and responsibility" (Participant 3)

UKAD view

UKAD explained that each sport federation should develop its own anti-doping strategy. It is though considered to be a challenge, and UKAD acknowledges it cannot require such task from sport federations. Indeed, UKAD says it would never impose this upon sport federations.

"What we try and do is get each national federation to have their own clean sport or anti-doping education strategy [...] that they own the issue and they own the requirement to provide education."

UKAD's intention is to work with sports to help them understand the value of owning, developing and implementing a sport specific education plan that address the specific risk within their sport. UKAD tries to do this by demonstrating the benefits both corporately, in terms of risk and reputation management, and to the athletes, support staff and mass participants by promoting the success other sports have had by adopting this approach. UKAD would not, and does not, force sport federations to adopt this approach. Ownership is key to the approach's success.

Objectives and Evaluation

As a result of the absence of education strategy by most sport federations, very few have clear objectives in terms of anti-doping education for their programmes. It is recognised by sport federations that it is difficult to set objectives in term of anti-doping education given the qualitative aspects to it, and therefore it is challenging to measure them through key performance indicators.

“We don’t have any objectives set [in term of anti-doping education].” (Participant 8)

“there are objectives that I set but they’re not necessarily quantifiable as such, they’re more qualitative.” (Participant 6)

The main objective mentioned by one participant is *“to ensure that we educate every funded athlete at least and obviously giving them the knowledge both to self-manage the products that they are taking and the awareness to then also go through the protocols of what would happen in a doping control.” (Participant 3)*

Monitoring and Reporting

Most sport federations keep a record of athletes who have been educated and when. It is considered necessary and particularly useful to monitor anti-doping education programmes in order to avoid any complaints from athletes arguing they were not aware of anti-doping regulations.

“There will be a record of what training they’ve done. Within the team, that will all be recorded.” (Participant 10)

Despite the monitoring taking place, sport federations do not regularly report to external bodies. Some sport federations mention they annually share information with UKAD, but two regional sport federations highlight the fact that there is no clear reporting or supervision from funders about the implementation of anti-doping programmes. There might be a lack of supervision of whether sport federations actually deliver education activities and particularly at regional level.

“They [UKAD] don’t necessarily ask us for what we’ve done annually and that sort of thing but we do have an agreement whereby we share information about education.” (Participant 9)

“I don’t know whether people would know we weren’t [delivering anti-doping education] because nobody necessarily checks with us.” (Participant 7)

UKAD view

UKAD measures each sport's ability to educate across each level of their pathway and to record what has been delivered to whom, when.

However, data is anecdotal and *"the monitoring is limited [...] to where [UKAD] has ultimate control"*. UKAD is working to improve the monitoring in line with procedures employed in the lead up to major games (e.g. London 2012, Sochi 2014 and the Commonwealth Games) where sport federations are held more accountable.

UKAD points out it *"advise[s...] national federations to monitor and also to share their data with us [UKAD] but they don't all do that and that's their choice"*. According to UKAD, failure to share information with them may mean that a sport federation's delivery and implementation is less effective than it might, with a resulting impact on athletes' knowledge levels.

Support

The main support regarding anti-doping education comes from UKAD. It is seen as the main source and partner in anti-doping education. UKAD helped sport federations to realise the importance of delivering anti-doping education sessions and provides materials and guidance.

"we generally use stuff from UK Anti-Doping. Ultimately they're our partner in terms of anti-doping, so we'll use all their resources for our education, presentations and things."
(Participant 9)

"On the education side, we work closely with UKAD in relation to having an education programme." (Participant 1)

UKAD view

UKAD recognises it cannot deliver anti-doping education itself. It needs sport federations to do that, and UKAD will collaborate and help with their network.

"we can't deliver it, they have to do that for us, although we can help with our [Education Delivery] Network."

"If there's a sport that isn't doing it [anti-doping education] and we think they should be or they should be doing more, then we will proactively contact them and we will proactively ask to help them."

UKAD *"really appreciate what the national federations do"*. It is noted that *sport federations "are hugely supportive and [...] the vast majority do what they can with the resources they have available. I think it's a really good partnership actually."*

However, UKAD is perceived to mainly focus on high risk and on sport federations funded by UK Sport, and tends to neglect small and non-funded sport federations. Organisations that are not on the funding list are perceived to be excluded and not receiving the support or information required to deliver education.

"we don't feel that we get the support from UKAD." (Participant 5)

UKAD view

UKAD prioritises sports. It works with 50 government funded sports. And within that UKAD prioritises which sport they work with and spend their time with according to the risk of doping within the sport. This is based on an annual assessment of the risk of doping within sports in the UK. Support for education is prioritised based on that assessment.

“Anyone that is getting UK Sport Lottery funding, they are our absolute priority.”

UKAD looks at how a sport federation is capable of managing its own risk. *“Some sports are more capable than others.”* UKAD determines where to put their resources based on the level of risk for each funded sport and their capability.

UKAD noted it is rare that sport federations which are not receiving funding from UK Sport get support, even though they have national elite teams.

“It’s rare for us to work with a sport that isn’t funded.”

Regional federations tend not to work directly with UKAD, and instead when available they follow the guidance of their British sport federation in term of anti-doping.

“Nothing direct from UK Anti-Doping. I know that [our British sport federation] gets considerable support from UK Anti-Doping, so it’s almost a two tier thing.” (Participant 2)

Sport federations stated they have no relations with WADA, but have access through UKAD. Sport federations do not seem to use WADA’s tools in term of anti-doping, and do not think that their athletes do. The information they receive and use seems limited to WADA Code changes and updates to the list of prohibited substances. They all declared to be compliant with WADA’s regulations and are informed by UKAD that they need to provide more than information and deliver education.

“I never really have any dealings with them and I don’t have anything from them [WADA]. UKAD kind of ensure that what WADA’s requirements are, are then passed on, so [...] anything related to WADA comes via UKAD.” (Participant 3)

International sport federations (IFs) do not seem to help much sport federations in term of anti-doping education. IFs are perceived as dealing with international level athletes and testing, and some do deliver their own education with little or no coordination with the athletes’ sport federation. From the perspective of some British sport federations, it seems there are different levels of interest and ways of managing anti-doping between UKAD and IFs, and British sport federations have to make both happy and bring together both approaches. Although it is not deemed conflicting, there is some confusion in terms of responsibilities over international level athletes given the number of organisations potentially involved in education (e.g. UKAD, IFs, National sport federations, and Professional players associations).

IFs and professional players association “may provide their own anti-doping education when you sort of join the programme. So when you first sign, when you first become a professional, you will get your education.” (Participant 11)

UKAD view

UKAD recognises there is no formal relationship with International sport federations, but it is something that needs to be developed to avoid confusion and lack of clarity given the new Code. Coordination is needed between different groups from which athletes will be receiving information or education, potentially from *“their national Olympic committee, from their international federation, their national federation, potentially their NADO and WADA”*.

“Co-ordination between all those groups is something we need to work on really hard [...] but [I have] not actually been able to create a real IF [International sport federation]/ national federation / NADO triangle, which I’d like to do because I think that would be a better way of using resources so that we don’t each do the same thing.”

UKAD notes however that it works with the Council of Europe Expert Education Group. There are opportunities to share experiences and practice and knowledge with other NADOs.

Government, national sport agencies, or sport institutions are not supportive of anti-doping education programmes in particular, except during major games when the latter wanted to *“making sure that nobody makes a silly error”* (Participant 2). Some sport federations considered that the government could play a role in education via the school curriculum. Schools might indeed play a key role in educating young people about doping-free sport as mentioned in the WADA code (2015), but it seems difficult to implement. Participants note it should not only focus on anti-doping behaviour, but more generally on healthy behaviours and related issues.

“there’s this stipulation in the new code about anti-doping in relation to school curriculums [...] it seems like it’s going to fall on UKAD and other national anti-doping organisations to pick that up and work out what does that mean because that’s enormous. How does anyone do that? For me, that’s the kind of thing that has to be driven by the government.”
(Participant 6)

In summary, sport federations have realised the potential risk not to deliver anti-doping education and with the support of UKAD, they have implemented anti-doping activities. Although sport federations monitor athletes who take part in these activities, there is a lack of objectives, evaluation and reporting, as well as overall an absence of strategy for most sport federations in terms of anti-doping education programmes. Regional sport federations follow the guidelines from their British sport federations, but some are confused as to what they need to deliver and to whom. UKAD rarely support sport federations not funded by UK Sport. Differences in the delivery of anti-doping programmes seem to exist across sports. Sport Institutions are not supportive of anti-doping education, except prior to major sport events. International sport federations do not support their

sport federations for the delivery of anti-doping education as they focus on international athletes and might educate them directly.

5.4. Good practices in anti-doping education

Sport federations have a range of activities and programmes on anti-doping. They provide regular education to funded athletes throughout their time on the elite pathways, and regular updates. Some sport federations organise at least once a year an education session or updates information as a refresher. The type of information communicated varies with the athletes' development and is more detailed as athletes go through the pathway. The support staff is also targeted such as coaches, physiotherapist and parents, whereas with the wider membership, it is more about informing and signposting bits of education.

"then [education] goes into more detail when they [athletes] get further down the pathway of drug testing, what to expect." (Participant 3)

"we provide them [athletes] with regular education throughout their time on our pathway and then regular update and that sort of thing as well as with athlete support personnel too." (Participant 9)

UKAD best practice

UKAD has an athlete pathway which has different phases along with the athletes' stages of development from young talents to elite athletes. UKAD has a curriculum which *"defines what messages and what education should be delivered to each level of the pathway."*

The values of anti-doping are explained early in the athlete pathway, and by the time athletes are at national level, they have self-management of the use of medication and they should know how to use 'Global DRO' (i.e. Global Drug Reference Online <http://www.globaldro.com>) which gathers information on prohibited substances. The type of message that is promoted to athletes emphasizes clean sport and protecting clean athletes, and seems to focus on avoiding inadvertent doping. One participant mentioned that it is not about *"insinuating that they may be tempted to cheat"*, but making them understand that if they need medication, they need to check that it is allowed. (Participant 11)

"once we've done the values, [...] then by the time [athletes are] at national level going into Global DRO usage, so use of medications, then they've got self-management." (Participant 3)

UKAD view

UKAD agrees it is important to embed the values behind anti-doping and points out it looks *“at education based around values and behaviours so that [UKAD] can try to build with athletes the right behaviours and the right values”* to develop a robust approach to decision making if they are under pressure or in a situation where they face a doping decision.

UKAD recognises that it is *“the pressure points that might push people to make a wrong decision.”*

The message delivered by UKAD is focussing on clean sport, they want to protect clean athletes.

“we don’t want to talk to people about drugs. We want to talk about clean sport”

UKAD declared it has worked hard to change its image towards an organisation that protects clean athletes, and it seems to be understood as athletes *“want to be ambassadors for clean sport”*.

“The culture of UK Anti-Doping is much more about protecting our clean athletes and it’s seen to be like that rather than a police force who are trying to catch people out. So we’ve worked quite hard at changing that image.”

Athletes *“don’t like it [being tested] but they’re prepared to be tested with good grace and they tweet that they’ve been tested, they’re open about it, they see it as a way of proving that they’re clean rather than somebody coming to try and catch them out.”*

Athletes’ self-management is important and education is a way to promote it and to provide athletes with the tools that will enable them to self-manage. Furthermore, sport federations also promote self-education through posting information and links on their website which can be accessed by any athletes no matter their level, including recreational. The objective is that people self-educate.

“we’ve got some content which we’ve developed with UK Anti-Doping on our website around all the key areas really, so supplements, checking meds, testing processes, that type of thing, so that people can kind of self-educate basically.” (Participant 9)

Some sport federations organise one to one sessions or face to face inductions with athletes to inform them and ensure that they fully understand the system around anti-doping with regards to the Anti-Doping Administration & Management System (ADAMS) and the consequences of non compliance (<https://www.wada-ama.org/en/what-we-do/adams>). Collective sessions would also be organised in parallel.

“we always do a 2 hour face to face induction to ensure that they [athletes] understand not only the logistics of how it [ADAMS] works but the whys and reasons and the consequences.” (Participant 3)

Sport federations, and particularly individual sports, use training camps and competitions to inform athletes and organise anti-doping education sessions. One sport federation mention they invited a former athlete convicted of doping to speak about it, and it was very effective (Participant 2).

"It will probably more be done as a collective and he'll do sessions with them just explaining to them the issues." (Participant 1)

"a camp is a good time to try and do it [education] because you tend to have them and you've got them on a residential, so you can do it in an evening ." (Participant 12)

UKAD best practice

UKAD states that the best anti-doping education activities are face to face, education sessions and are interactive. This is deemed effective due to the possibility of checking learning, but is recognised to be the "hardest to organise".

"It [anti-doping education delivery] should be really interactive, it should involve games, it should involve fun stuff, it should involve lots of role play, lots of question and answers. It shouldn't be a boring lecture."

In circumstances where/when face to face education cannot be done, UKAD will organise webinars. However, UKAD does not "have an online course for athletes because we [UKAD]'re resisting that"

Testing is also recognised by some sport federations to be part of the education. Increasing the number of tests and organising dummy tests would raise awareness that everybody can be tested, and prepare athletes to what they should expect when they will be tested.

"I wanted to do a dummy test, so the guys knew what it felt like to be tested" (Participant 6)

"we've done some education that has included dummy tests so that athletes have actually gone through the process." (Participant 2)

Sport events are seen as opportunities to implement prevention activities and diffuse the message of anti-doping to athletes, support staff and parents. Likewise, major sport events such as London 2012 and Glasgow 2014 have refreshed anti-doping awareness among athletes and support staff as a result of the prevention activities that were being done prior to the event. These activities were mandatory and supported by Sport Institutions, but one participant regrets it is not supported / funded anymore (Participant 8)

"At major games, obviously with the Commonwealth Games recently, again it [anti-doping education] was a sort of compulsory component anyway" (Participant 3)

"we made sure that all athletes had additional training [on anti-doping] going into the Commonwealth Games, additional awareness." (Participant 7)

UKAD view

UKAD aims to ensure that every athlete going to major events has received proper education, and it monitors that. It depends however of the policy of the major events organisation.

Where UKAD has been unable to educate an athlete, it works closely with the sport federation to ensure they are aware and that the athlete has the correct information and education provided to them via their sport federation.

“where we [UKAD] didn’t educate somebody, we sort of devolved our responsibility and went back to the NGBs and said, look we’ve done everything here with this particular individual, it’s now your problem.”

For Rio 2016, there will be *“a requirement on the national federations to ensure that their [...] elite athletes have been through education that we [UKAD] approve.”*

As some athletes might not have access to proper education, one federation is in the process of making a video for them that will promote clean sport and will raise awareness that it is the athletes’ responsibility to check whatever they are taking.

“we’re very aware that outside the [best athletes] there will be [athletes] who don’t have adequate education, so we’re in the process of producing a video and that will be quite straightforward. [...] We tell them where to check with Global DRO, we’re going to tell them that clean sport is what we’re all trying to encourage and that anything that turns up in your system may test you positive and provide them – not treat them as if they’re criminals but say, it is very easy to make a cock up.” (Participant 11)

UKAD Education Delivery Network (<http://www.ukad.org.uk/partners/edn>) which provides a range of training programmes and tools such as 100% Me and the advisor and educator programmes are deemed satisfactory by participants but it does not seem appropriate for more specific questions / issues regarding doping.

“It [100% Me] touches athletes’ pride. It is really a good education tool, particularly for younger athletes.” (Participant 5)

“Even though I’ve done the adviser’s course and the educator’s course, I don’t necessarily feel confident. I’m quite happy to deliver some quite low level stuff but I wouldn’t feel confident in delivering anything more than that.” (Participant 5)

UKAD best practice

UKAD is running the Education Delivery Network which is believed to be effective, and possesses a database of educators and advisors.

“Educators are employed by or nominated by each national federation. And we train them to train and then they can create whatever materials they like relevant to their sport as long as the core curriculum is within those materials.”

5.5. Is anti-doping education effective?

Participants believe that anti-doping education is effective, but it is difficult to measure. Awareness and knowledge have been improved about what athletes should avoid and where they should check. People are more aware of their responsibilities.

“There seems to be a good level of understanding and knowledge which means people do the right things, make the right choices and communicate when they are using medication of whatever nature to be sure and to be safe.” (Participant 7)

“I think it is and I think one of the best things about it is putting the onus [...] back on the athlete that it’s their responsibility so if they get caught out for anything” (Participant 8)

UKAD view

UKAD states *“the biggest visible sign that it’s working is the enthusiasm of the national federations and the athletes themselves for taking part in the process and their enthusiasm for clean sport.”*

However, one interviewee (Participant 11) argues the anti-doping system does not seem to be working properly as inadvertent doping gets caught.

“the system is a great deal of money spent for very little gain because it’s not a deterrent. Is it a deterrent, does it actually stop people cheating? Quite clearly the answer is no, it doesn’t. Does it pick up people who make cock ups? Yes, it does. But does that stop people making cock ups? No, it doesn’t.” (Participant 11)

Though, most participants note that education reduces the risk exposure regarding inadvertent doping, but not really conscious doping behaviour. Indeed, participants declared that if athletes really want to dope, any education would not change anything.

“[anti-doping education] probably prevents the inadvertent kind of drug use which I think is probably the most common anyway, if they’re sort of just not aware. [...] But [...] if somebody’s determined to dope, I’m not sure how much education will help them because the bottom line is if they’re going to do it, they’re going to do it.” (Participant 12)

“If somebody’s deliberately breaking the rules, all that education has no impact at all, it’s irrelevant. But what we’re trying to make sure – for me, the education side is number 1, it’s about making sure that people don’t fail their test for something stupid that’s avoidable.” (Participant 2)

UKAD view

UKAD recognises that if somebody really wants to dope, education will have no impact. However, the culture and people around the individuals can. Athletes *“need to be in an environment where doping is not acceptable.”*

“The biggest deterrent for serious doping is the culture of that sport and the culture that surrounds an individual.”

According to UKAD, athletes need to know how to make the right decision. They need an ethical behaviour built on strong moral values, and it works together with the deterrence of testing. The ethical deterrent is important and needs *“to be there to back up the fear of testing positive.”* UKAD notes that the *“deterrence of testing is a vital part of the overall prevention programme but it has to start with the values”* which UKAD hopes athletes possess.

One participant mentioned the effectiveness of education programmes British athletes had received abroad such as within clubs outside the UK seems different to the education they would have received if they had been permanently in the UK. The delivery of anti-doping education seems far from being consistent across countries, and British athletes abroad or athletes from different countries might not possess comparable knowledge in terms of anti-doping as compared to athletes based in the UK. The lack of international harmonisation of anti-doping education represent a risk as some athletes abroad might not be properly educated and might lack knowledge in terms of the requirement and responsibilities within the anti-doping system.

“the education that they’d received by their European clubs was very different to that if they had been perhaps permanently in the UK.” (Participant 3)

5.6. What are the challenges in anti-doping education?

Capacity

Some participants recognise their sport federation do not have the knowledge, expertise and/or resources required to deliver anti-doping education activities. They might rely on specialists in terms of anti-doping and anti-doping education such as sport doctors or lawyers. Other sport federations mainly rely on UKAD. It is mentioned by one regional sport federation that the system (e.g. including their British sport federation and UKAD) has the capacity to deliver education programmes which seems sufficient, but the regional federation itself might not have the capacity.

“We don’t have the knowledge ourselves, we don’t have the resource.” (Participant 5)

“I’m comfortable that the system has the capacity. We may not ourselves but the system does, so as long as the system does, that’s OK because that’s a partnership at that stage.” (Participant 2)

Sport specific message

Some participants argued that the materials used by UKAD are general and sometimes dated. It has been created for every single sport and it is not sport specific enough. Participants pointed out key anti-doping messages can be general, but it is important that anti-doping education programmes and materials are specific to the needs and requirements of their sport.

“It’s general and some of it is very dated [...] that presentation or whatever was created for every single sport for someone to take it and deliver it to any athlete and that’s why I’ve never used any of their materials.” (Participant 6)

“to gauge an initial interest and to get people in the room, it needs to be [sport] specific.” (Participant 5)

UKAD best practice

UKAD fully accepts that *“each sport would prefer everything we do to be tailored to their sport and, where we can, we do but that’s not always possible because we don’t have the resources to do that.”*

UKAD acknowledges it is best to personalise / tailor the message of anti-doping to each sport, but that’s not always possible because UKAD does not have the financial resources to do that. UKAD tries to bring the context of the sport during sessions, but it is also up to sport federations to do that. UKAD would provide materials or tools that sport federations can personalise, which might require financial investments from them.

“we have a 100% Me App and sports can provide us with content to personalise that for their members and that doesn’t cost them anything.”

“we will create something that they can then personalise but sometimes that also requires financial investment from them.”

Some sport federations state they have their own materials or they (need to) take ownership of the general materials provided by UKAD by adapting the tools and presentations to their sport to make it more interesting, attractive and relevant to athletes with, for instance, the use of the terminology in their sport or, if available, the use of examples of doping behaviour within their sport. At the same time sport federations seem happy with the general key messages delivered by UKAD as they might be afraid to deliver the wrong message or concern about the time it would take to constantly update the information. There is indeed a downside to specific anti-doping messages and there should be a balance between what should be specific and what should be kept general.

“we tend not to produce our own material. We will brand the logo but we don’t want to have to constantly update our guidelines, our recommendations, our website.” (Participant 11)

Human and cultural challenges

A main challenge recognised by all participants is to get people (incl. athletes, coaches and parents) interested about anti-doping. Most people do not have time nor interest. The message of anti-doping is repetitive and can be seen as boring according to some participants. There is a need to make the message relevant and linked to athletes' interest and it is a challenge to motivate them. As mentioned by a participant, a governing body's job is to keep people in the sport, and not putting people off that sport. So there should not be too much about *"the boring stuff"* as *"kids will find stuff like this [anti-doping education activities] boring"* and they risk to *"switch off"* (Participant 2). According to participants, it is a challenge to find the right balance between the delivery of anti-doping activities and the other aspects of the sport such as training. Furthermore, the time athletes and coaches can dedicate to anti-doping is limited, participants also point out it is about finding the right timing to delivering session.

"the challenge is probably creating that engagement at the right time when the athlete's ready to listen to it and there are good times and there are bad times" (Participant 2)

UKAD view

UKAD acknowledges it has *"to make and help federations make any education sessions as interactive and [engaging] as possible"*.

Athletes have a lot to deal with, and anti-doping might not be their priority compared to nutrition, psychology, and obviously training. There is a tendency according to participants to neglect the importance of anti-doping from the athletes. This might be related to doping not being seen as an issue by some of athletes who do not feel concerned and are not interested although participants stressed they should as it does concern them and anything they take. Indeed, according to participants, people might not think anti-doping applies to them and would think it is about drugs, but participants clearly point out it is not. Athletes are taking supplements and they should make sure what they are taking is clean.

"it [anti-doping] is part of an athlete's life but we've got to also put it in perspective, that there's many other elements of an athlete's life that need more time of an athlete's day to be talked about [... and that] hold a bigger priority." (Participant 3)

UKAD view

"I think the challenge is making the messages clear and relevant and timely, which is the challenge with all communications and education."

UKAD notes that people need *"to realise it's a constant requirement to be up to date and aware of risk."*

UKAD also notes that an elite athlete's time is very precious and they have many requirements placed on them by their federations, sponsors and others. This is a potential barrier to providing education which can be deemed less of a priority by some support personnel.

"Evidence suggests that the barrier can be the various levels between us [UKAD] and the athlete, whereby the information we intend to provide can be dismissed as not relevant by those other than the athlete themselves."

Legal challenges

A few participants mentioned that there are legal factors which concern the delivery of anti-doping education sessions or anti-doping information which would engage the responsibility of sport federations, and that can be a cause for concern. Indeed, sport federations' staff need to be very cautious when informing athletes. They cannot be too specific about products.

"we've got to be very careful saying to someone – unless it's actually on the prohibited list – no you can't take that because then we might have a manufacturer coming on to us and saying, why are you saying that? [...] we're here to give guidance, not advice." (Participant 1)

Organisational challenges

The way some sport federations are structured does not facilitate actions towards amateur sport and thus amateur athletes who could eventually get to elite level. Within some sport federations, there is a split between elite and amateur, and the only focus might be on the elite level. Some regional federations admitted they receive a lack of direction and information from their British sport federation. They do not know what they are supposed to do with athletes who are not part of the British programme yet. The responsibility towards these athletes funded at regional level but not at British level is not clear across all sports.

"we get no direction and no information from [our British sport federation] about what we should be doing and how that should look. So at the moment they're not leading on any sort of education programme and I think they should be." (Participant 12)

Participants noted that small organisations are not equally equipped as compared to larger organisations with resources and staff to run education activities. Therefore, there is a lack of consistency across sports regarding anti-doping education programmes delivered. Participants note as well that the lack of consistency is also an issue across countries.

“smaller NGB won’t even have that person [someone in charge of anti-doping] in at all. So there’s no consistency between any of the sports.” (Participant 3)

Athletes are travelling or are based at different places. It seems difficult to gather them at one place for education programmes, and ask them to dedicate time to it. This is particularly true for individual sports for which respondents found the logistics to have everybody at the same place challenging. It is though noted by a participant that this challenge is the same for *“other walks of educating an athlete”* as well as getting them to the best coaches and best competitions (Participant 2).

“The challenge for us particularly is the logistics. [...] we’re not a team, we’re an individual sport and the individuals train all over the country. So delivering education sessions is logistically a nightmare because they [athletes] do only come together at camps.” (Participant 3)

UKAD view

UKAD acknowledges sport federations would prefer to be able to offer online course to avoid the logistical problem of bringing people together. However, UKAD appreciates sport federations bring athletes together all the time for other reasons (e.g. training camps), and suggests there is time when anti-doping session can be organised. UKAD states they *“will go anywhere at any time to provide face to face education.”*

A further organisational challenge is that some sport federations recognised they have no control over some athletes. They might have their own programme with little contact with the sport federation or get the education through their clubs, and it is sometimes outside the federation’s scope and responsibility. This again threatens the consistency of anti-doping education programmes that athletes received within and across sports.

“In fact, the majority of them [athletes] we have no control over. They have their own sponsors, they have their own coaches, they travel and do what they want to do.” (Participant 11)

“the worry is that people who are not directly under our control, [training abroad] and they sort of muddle along doing their own thing without any supervision. [...] it is potentially a worry because those people will escape the net of education.” (Participant 11)

6. Conclusion

6.1. Anti-doping education system in the UK

Sport federations have responsibilities in terms of anti-doping education, and some recognised it is a priority to ensure that athletes have the correct attitude and values towards doping to make the right decisions. However, the issue of intentional doping is recognised as a low risk for sport federations in the UK. The main concern is inadvertent doping. Therefore, sport federations aim to teach athletes self-management and make them aware of their responsibility to check whatever they take. Education activities may mainly focus on avoiding athletes to make a mistake which question the role of anti-doping education and the type of message that is delivered.

Following recognition of the risk not to educate athletes and support staff about the anti-doping system, sport federations, supported by UKAD, have decided to implement anti-doping education activities. However, they are not able to do so to the same extent. Indeed, the resources and expertise vary between sport federations, and not all are able to deliver a sport specific message in a timely manner. Most sport federations have monitoring systems in place to assess who has been educated, but there is a lack of strategy. Sport federations do not have clear objectives and measurements in the delivery of anti-doping education, and some do not report back to UKAD. At regional level, some sport federations recognised a lack of direction regarding the anti-doping education responsibilities they have towards athletes, particularly those moving up to British elite level.

Despite the lack of measurement, sport federations believe anti-doping education programmes are effective as they have raised awareness from athletes and support staff. However, participants and UKAD also acknowledge that education would have no impact if an athlete has decided to take an illicit substance. Moreover, British athletes abroad might not receive proper education as they are perceived to be mostly outside the control of their sport federation. Similarly, some sport federations and their athletes might not benefit from UKAD support as the latter focusses on high risk sport federations funded by UK Sport. Hence, the delivery of anti-doping education activities seems inconsistent across sports, and athletes from different sports might not receive the same level of education.

The World Anti-Doping Code published in 2015 recommends to national sporting organisations to inform and educate recreational members. But despite doping being recognised as an important contemporary issue, it is deemed unrealistic for sports federations and UKAD to meet WADA's

recommendation given their current resources. Furthermore, some sport federations declared that doping is not seen as an issue at recreational level as these participants will never be tested.

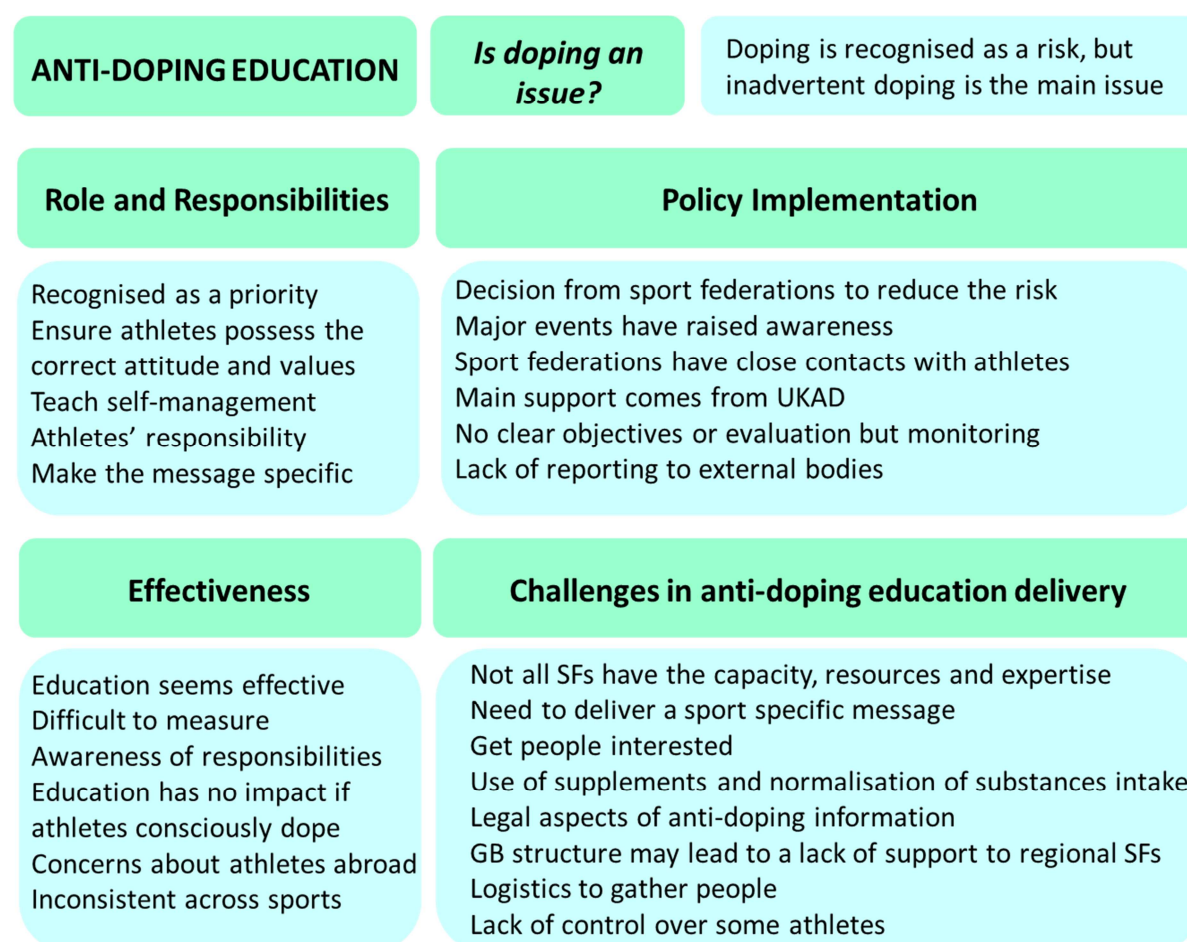


Figure 2: Synthesis of the research findings

A major challenge raised by participants is to get people interested about anti-doping. Anti-doping education activities have to address athletes, coaches and parents. They need to be sport specific and interactive, but not all sport federations are able to invest in such type of education activities. UKAD provides support and materials, but it is deemed general and does not always meet athletes' interest. Another major concern from participants is the use of supplements by athletes as it normalises taking substances that can potentially be contaminated. Anti-doping education activities need to tackle that habit and make athlete aware they need to be sure supplements are clean.

Good practices in anti-doping education

- Sport specific messages addressed to athletes and support staff
- Regular education to funded athletes in the pathways
- Tailored education/information to athletes' level
- Face to face delivery and interactive workshops
- Use training camps and competitions to educate
- UKAD Education Delivery Network (e.g. ambassadors)
- Teach self-management (e.g. Global DRO)
- Focus on clean sport messages and values (100% Me)
- Promote self-education (e.g. websites)

Figure 3: Examples of good anti-doping education practices

Examples of good practices have been shared by participants. Sport federations regularly educate funded athletes in the pathways and aim to tailor the information and education to athletes' level. It is acknowledged that the best delivery method is face to face sessions and interactive workshops. Some sport federations also use distance learning tools such as a video. Training camps and competitions represent an appropriate time and place when athletes and support staff can be educated. UKAD has put in place an Education Delivery Network which is composed of advisors and educators, both ambassadors of clean sport, which is deemed satisfactory by participants. Different tools supported by UKAD are used by sport federations, athletes and support staff such as '100% Me' that reinforce moral values in sport and Global DRO that allow athletes to check substances they are taking are authorised.

6.2. Recommendations

Clearer responsibilities for sport federations

- Define clear responsibilities for sport federations towards the type of anti-doping education that needs to be delivered and the people that needs to be targeted in order to reach consistency across sports.
- Clarify the role and scope of anti-doping education for regional sport federations in accordance with their British sport federation.

Improve the way anti-doping education is delivered.

- A clear and consistent message across sports that is more athlete friendly.
- Interactive anti-doping education sessions that tackle key issues such as supplements.
- Training sessions at national coaching conferences or athletes' training camps.
- Anti-doping education activities directed to athlete's parents.
- More testing or dummy tests to raise awareness that athletes might be tested.
- Use different channels to deliver anti-doping education such as up-to-date online information and materials, sign-posting videos and eLearning.
- Use the legacy of major sport events when sessions are funded by sports institutions.

Collaboration between sport federations

- Share models of good practice in anti-doping education between sport federations, and include sports that are non UK Sport funded.

A better monitoring system

- Identify objectives in terms of anti-doping education programmes at sport federation level.
- Evaluate education activities in terms of interaction and engagement during sessions, knowledge acquired, and ultimately changes into individual practices.
- Regular monitoring of athletes and support staff (e.g. coaches and parents) who followed education activities and when.
- Regular reporting to UKAD or through the British sport federation.

Policy reforms

- Recognition by funding agencies of the role of sport federations in doping prevention that could provide the latter with specific funding to allocate to anti-doping education activities.
- Doping / recreational drugs prevention could be taught in the school curriculum
- A social drug policy could be created to address athletes who make a mistake by taking recreational drugs as they are currently treated as cheats, but actually may need to be handled differently and receive appropriate support and sanction.

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Appendix A - Author bio

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Appendix B – Interview guide

Place:	Sport federation's name:
Date:	Interviewee's name:
Time in:	Interviewee's position:
Time out:	Sport federation size:

Role

- Could you summarise the role of your sport federation with regard to anti-doping education?
 - What is your sport federation responsible for?
 - Is there a clear policy to develop anti-doping education activities in your sport federation? Is it part of its main policy?
- What is your role with regards to anti-doping education in your sport federation? Is there anyone in charge (anti-doping officer)?

Anti-doping culture

- Do you consider that doping is an issue in your sport?
 - Is there a strong anti-doping culture in your sport/ federation? Why? How do you know?
 - Is it a priority for your sport federation?
 - Do you have a history of doping prevention in your sport / federation (culture)? Any recent change?
- Are you influenced by other organisations (in the UK, EU or international) when deciding to develop education programmes

Doping prevention activities

- What kind of anti-doping education activities are developed by your sport federation? How many per year?
 - Do these activities target specific types of members (e.g. elite athletes, amateur, recreational, adults, youth)?
 - Can you give examples of activities developed by your sport federation that prevent doping behaviour? (e.g., not testing, but education or information)

Implementation

- Who decide to implement anti-doping education programmes / activities?
- How do you communicate about them? How do you ensure that people know about these activities, are informed or take part?
- What objectives do you set for doping prevention? If any?

- Do you evaluate the success of anti-doping activities? How?
- Are anti-doping education activities being part of your sport federation's annual activity report?

Doping prevention effectiveness

- How effective do you consider these anti-doping education activities?
- In your sport do you think doping prevention prevent anti-doping behaviour (cause – effect)?

Doping prevention capacity

- Do you consider you have sufficient knowledge and expertise to develop education programmes?

Support for doping prevention

- What support do you receive, and from who / which organisations, to develop anti-doping education or doping prevention activities in your sport?
 - How are you informed what you should do in doping prevention? And by whom?
 - Do you receive support from the government to develop doping prevention programmes?
 - Is doping prevention coordinated at higher level? UK Anti-Doping only?
 - How do you cooperate with UK Anti-Doping / sport federations?

WADA policy

- Do you consider you meet WADA requirement for a sport federation?
 - Is there any clear guidance on what sport federation should do in doping prevention from WADA? from UK Anti-Doping? (*To conduct anti-doping education in coordination with NADO*)
 - Do you adapt WADA / UK Anti-Doping requirements to your sport/context? Or do you implement them as they are even if it changes the way you work?

Non-compliance

- Are there sanctions if you do not implement doping prevention activities?

Challenges in doping prevention

- What are the barriers and challenges your national sport federation faces to implement doping prevention programmes / activities?

Future steps in doping prevention

- How can doping prevention be improved at national level through sport federations?

Appendix C – Additional quotes from interviews

Low risk of doping

“It’s an issue in every sport. However, we are considered a low risk sport” (Participant 3)

“doping is not an issue in [our sport]” (Participant 4)

Risk of inadvertent doping and supplements

“I am not in anti-doping to tell people not to cheat. People know not to cheat. [...] my anti-doping is preventing people being labelled as cheats when in fact they’ve made a cock up.” (Participant 11)

“That’s our biggest threat is inadvertent doping. So we do try to educate.” (Participant 5)

“There’s not many high performance athletes in sport across sports that don’t use supplements of one nature or another and I think the market’s responded to that and they understand the importance of clean supplements and so there are now providers out there that will give you guarantees.” (Participant 7)

Reputation risk

“If we had a bad reputation in any way, including with doping, that would affect our potential sponsors. But let’s not forget our biggest sponsors at the moment are the funding agencies.” (Participant 10)

Role and responsibilities

“we do have a responsibility to make people aware and give them the information, the tools and things to be safe.” (Participant 9)

“we’re under the auspices of the British body, [...] so in terms of us having to take the ultimate responsibility, we don’t.” (Participant 12)

UKAD view

There is a requirement from UKAD that sport federations should have an anti-doping office who will liaise with them.

“Every sport has to have a nominated anti-doping officer”

Responsibility to make the message sport specific

“It [anti-doping message] 100% needs to be specific to the sport and I think that’s where the freedom should be given and the confidence should be given to the national governing body that they will deliver that.” (Participant 3)

Athletes' responsibility

"As a governing body, we just need to make sure that those players go and compete with as much knowledge as they can and then it's their choice." (Participant 5)

Target groups

"what's even more important [...] is that the coaches and managers who work with them [the athletes] not only talk the talk on that [attitude towards the issue of doping] but walk the walk." (Participant 4)

"whenever I do training for the academy athletes, I encourage their coaches or their parents [to sit on the training]." (Participant 8)

"we just wanted to make sure we covered everyone down to young athletes who'd made the squad for the first time" (Participant 7)

Strategy and objectives

"we sat down and we spent a lot of time and effort and we published it [anti-doping education strategy] and then[...] they [UKAD] dropped the idea. So nobody else seems to have followed the plan." (Participant 11)

"it's working, the way we do it is working, it's an education programme, so we roll stuff out, we make people aware, there's no issues coming out from it. So I don't think it needs objectives as such. There's no [need] – we're probably objective and target and KPI overload as it is." (Participant 7)

Good practices

"The sessions I do with the academies are normally a bit longer and probably a bit more interactive because there's a bit more time." (Participant 6)

"There's an induction session once a year where they [athletes] have [information about whereabouts arrangements for testing and protocols] and they are reminded if they are there from the previous year." (Participant 10)

"100% Me is the sort of thing that you would focus on to make it quite clear that it's the individual athlete's responsibility. (Participant 1)

Legacy of major events

"the education side of anti-doping has increased significantly since London 2012" (Participant 3)

UKAD Support

"That's what's delivered by UKAD and they gave the good resources out and that's why we'd be encouraging them – next time we ask them to deliver, I would expect that again to give the 100% Me and then get the athletes to go on Global DRO and check because every sport's different, they

can check what's prohibited for them, so it's the most effective way of doing it. So yeah, they're really good resources." (Participant 8)

"We work with UKAD at big events such as conferences and international championships, UKAD are invited to bring along a stand so they can actually be there and talk direct to athletes, parents and coaches. So where we can, we work in partnership with UKAD."(Participant 10)

International sport federations' support

"[Our IF does] Not a huge amount really I guess because [our IF] they're primarily concerned about international [level].

"[Our IF] they're probably travelling slower than we are though, yeah. I think the international federation's even more juvenile than we are."

"[IF and Professional players associations] provide their own anti-doping education when you sort of join the programme. So when you first sign, when you first become a professional, you will get your education."

WADA

"We have no dealings with WADA at all." (Participant 5)

"with the new WADA code, it's a requirement for the national federations to provide education to the sport in general and that is distinct from the provision of information. Until now, provision of information has been sufficient but now we need to do more than that." (Participant 10)

"I'm not sure but I'd be surprised if a [athlete] ever gets anything straight from WADA." (Participant 6)

"WADA is very generic and a bit didactic but that's because it's done by lawyers. So by the time it's filtered down through UK Anti-Doping, it's a little bit more palatable. So yeah, I think they've got plenty of resources but we don't tend to use them." (Participant 11)

Low interest in doping

"because we don't have those examples [of doping in our sport], there is this attitude, well it won't happen to me." (Participant 5)

"the challenge is going to be next year is actually incentivising people from ordinary [...] clubs, schools and universities to attend training." (Participant 10)

"the challenge for me talking about [anti-doping] is trying to keep the same information interesting and fresh because that's quite difficult especially when you're speaking to the same people every year really." (Participant 6)

Capacity

"We deliver a lot of sessions but not so much that we can't necessarily handle it all" (Participant 9)

"We definitely have the knowledge and the expertise but we don't have the people." (Participant 3)

"I don't know how perhaps some smaller organisations might be faring if they've got somebody who's dealing with a number of other areas and things at the same time, it could be quite difficult for them." (Participant 9)

"Education I think – what are the barriers to that? Just time and resource." (Participant 1)

"We're a larger more organised country whereas the smaller countries we know don't have those finances and the set up that UKAD is. [...] we're supported and we use the resources. But are the other countries? Perhaps not to the same degree but that's not because of WADA, that's because of the country." (Participant 3)

Sport specific message

"It [doping examples] has to be sport specific because they [athletes] don't relate to that and you want people who relate to modern [athletes]." (Participant 11)

"There's always going to be the same message perhaps, underling message. However how it's delivered and making the message delivered relevant to that sport, it 100% needs to be specific to the sport and I think that's where the freedom should be given and the confidence should be given to the national governing body that they will deliver that." (Participant 3)

GB structure

"there's no ambiguity at all, it's very clear. So if we then have an anti-doping case, it's crystal clear in terms of who has responsibility and authority" (Participant 2)

"That's often the case with a lot of the sports is that the first bit of education they'll get is when they go into a GB programme, go into international competition." (Participant 8)

Logistics

"it's not a team sport, you never have everybody in one place at one time" (Participant 11)

"[the challenge] It's just the sheer logistics of the fact that they're all over [the country] tonight. How do you get them together? Which is why we do it around competition or training camps where they're coming together anyway." (Participant 2)