A Study of Asahi Shinbun Articles Relating to Doping among Athletes since World War II

Kazuma ARARAGI*, Masahide OMORI* and Hirotoshi IWATA**

The purpose of the present study was to search for the historical concerns of doping and the social recognition on it for the last 50 years by the contents analysis of articles in the Asahi Shinbun, one of the leading newspapers in Japan. The following results were obtained.

1. The first article on doping, concerning the death of a Danish cyclist in the Rome Olympic Games due to the use of roniacol of vasodilator as a stimulant, appeared in 1960.

2. The volume of the articles about doping increased from the beginning of the 1970s, reflecting increase of the social interest in doping, represented by the introduction of a doping control test in that time.

3. The marked increase in the volume of articles about doping was observed in 1988, when the scandal of Ben Johnson occurred; in this year, the volume reached 802.3 column-centimeters and 88.1% of them treated his scandal.

4. The highest volume of the articles, i.e. 1,352.1 column-centimeters, among the 50 years was observed in 1994. This volume was equivalent to 5 pages of newspaper. Compared with the volume of articles about AIDS in the same newspaper in 1990 and 1991 (Hirata et al., 1995), that of doping was 79.1% and 113.0% respectively, implying that doping was socially concerned to the same extent which AIDS was.

5. The comparison of the volume of articles of doping by the categorized pages revealed that 91.2% were treated in the sports pages. It is recommended that the newspapers deal with more articles about doping, focusing on the morals and the side-effects in other pages than sports pages.

Key words: doping, Asahi Shinbun, contents analysis, sport athletes

I Introduction

It is called doping that a sport athlete takes some form of medicine to improve his/her physical conditions illegally, masks the medicine, and makes use of other prohibited methods (The Japanese Olympic Committee, 1994). The International Olympic Committee,

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Committee (IOC) defines doping as follows: “Doping contravenes the ethics of both sport and medical sciences. Doping consists of the administration of substances belonging to the prohibited classes of pharmacological agents and/or the use of various doping methods, blood doping and pharmacological, chemical and physical manipulations” (Comité International Olympique, 1997). The IOC decides which medicines and methods should be prohibited and establishes penal regulations to root out doping.

The etymology of doping comes from the liquor of “dop” which has been used by native people in Republic of South Africa to raise an aim mind (Hanley, 1979). Doping has been prevailed among the sport athletes since long time ago. In 1886, an English cyclist died from overdosing of trimethyl and around 1990 the use of drugs became so widespread, at least in the equestrian field (Dyment, 1984). The use of amphetamines to hold a soldier fatigue expression in Germany during World War II influenced sport athletes (Laties and Weiss, 1981). Furthermore, Mandell et al. (1981) reported that amphetamines had already been used since about 1940 among football players; their use was widespread in professional football players in the 1960s (Mandell, 1979). Doping has been prohibited from both aspects of sport ethics and medical science. From the viewpoint of medical science in particular, it is serious because of occurrence of death accidents.

As for the side-effects, there have been many reports regarding the use of anabolic steroids (Johnson, 1975; MacDougall, 1983), biosynthetic human growth hormone (Underwood, 1984), amphetamines (Bostwick, 1981; Kulberg, 1986), cocaine (Duda, 1986; Weiss, 1986), phenylpropanolamine (Bernstein and Diskant, 1982; Fallis and Fisher, 1985), and so on. A recent report pointed out that not only top athletes but also general competitors use doping (Delbeke et al., 1995), suggesting that doping is a problem in not only sport societies but also general societies. Similar to the use of drugs and stimulators, doping has become a serious social problem. It is thus necessary to properly understand and recognize doping and to root it out.

II Materials and Methods

1. Materials

1) Newspaper

The latest issues of the Asahi Shinbun (both morning and evening editions) printed by the Tokyo head office were subjected to analysis. The reason for selection of the Asahi Shinbun came from that it is recognized as one of the most representative newspapers in Japan.

2) Articles

All articles, which were judged by the authors to relate with “doping” from the items in indexes of reduced-size editions of the Asahi Shinbun, were selected for analysis.

3) The survey period

The newspapers published from August 16, 1945 to December 31, 1994 were examined for selection.

2. Methods of analysis

1) Standardization of the number of articles

One item in an index of reduced-size editions of the Asahi Shinbun was regarded as one article. When an article was divided into two items in the index owing to a long headline, it was counted as one.
2) **Standardization of the volume of articles**

The volume of articles was assessed by the way which was used by Hirata et al. (1995); the length of each column in the reduced-size editions was measured with a ruler. The volume was expressed by a unit of “column • centimeters”; space of headlines, pictures, graphs, diagrams, etc. were involved in the article.

3) **The volume of article by page categories**

The pages, in which the target articles appeared, were classified into the sports news page, the local news page, the opinion and commentary page, the front page, and others. The total volume of articles in each categorized page was counted.

4) **The volume of articles by nations**

In the analysis process of the articles, the authors specified the nation concerned in each of them. The total volume of articles by nations was counted. When a particular nation was not identifiable or there were a plural number of nations concerned, however, the article was treated as unspecified.

5) **The volume of articles by sports**

In the analysis process mentioned above, the authors specified the kinds of sports in the articles, and the total volume of articles for each kind of sport was summed. When a particular sport was not clear or a plural number of sports were simultaneously treated, however, the article was treated as unspecified.

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**Table 1 The code for classification of contents**

<table>
<thead>
<tr>
<th>1. Morals to doping (Morals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criticism to doping, boycott for a protest, an anti-doping movement, morals of sport, and others</td>
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</tbody>
</table>

<table>
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<tr>
<th>2. Doping suspicion (Suspicion)</th>
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<tbody>
<tr>
<td>Results of an investigation, an official announcement, present conditions of doping, comments of an athlete, facts, professions of a competitor and a coach, and others</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. A penalty for a competitor and a coach (Penalty)</th>
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<tbody>
<tr>
<td>Disqualification of a competitor, disqualification of a coach, objection of management, deprivation of a rank, alteration of rank, a justice, change of management, and others</td>
</tr>
</tbody>
</table>

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<tr>
<th>4. A doping test and a penalty system (Systems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensity of a penalty, an official announcement, how to test, explanation of a penalty, new prohibited medicine, and others</td>
</tr>
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</table>

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<tr>
<th>5. Technical skill for a doping test (Technical skill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skill, new skill, limit of a test, equipment for a test, comments about a technical skill, and others</td>
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<tr>
<th>6. Medicine and prescription (Medicine and prescription)</th>
</tr>
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<tr>
<td>New medicine, comments about a medicine, comments about a prescription, comments about doping methods, development of a medicine, and others</td>
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<tr>
<th>7. Side effect of doping (Side-effect)</th>
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<tr>
<td>Physical illness, death, mental illness, a deformed child, and others</td>
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<tr>
<th>8. General remarks to doping (General remarks)</th>
</tr>
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<tbody>
<tr>
<td>Comments of an intelligent person, reminiscences, comments on current events, background of doping, historical comments, questionnaire, and others</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>9. Suspected person’s movement (Personal movement)</th>
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<tbody>
<tr>
<td>Retirement, life after retirement, return to a competition, results of a competition, refusal to a competition, and others</td>
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</tbody>
</table>

| 10. Others (Others) |
6) The volume of articles by the contents

The authors classified all articles into 10 categories from the contents, as shown in Table 1. The total volume of the articles was counted separately for each category. When the content treated two or more categories, the volume of the article was allocated proportionately to them. However, the volume of article, the contents of which were complicated and thus were difficult for categorization, was equally allocated according to the number of categories.

7) The volume of articles with special topics

The volume of articles treating the specially interested news, such as the scandal of Ben Johnson, was treated and counted independently.

III Results

1. The volume and the number of articles by the year

The volume of articles concerning doping for the last 50 years totaled 7,881.6 column-centimeters (6,298.9 in the morning editions and 1,582.7 in the evening editions); the total number of articles was 742 (610 in the morning editions and 132 in the evening editions).

No article about doping was found before 1959 (Fig. 1). The first article, which reported the death of a Danish cyclist in the Rome Olympic Games due to the use of roniacol of vasodilator as a stimulant, appeared in the morning edition on August 30, 1960; its volume was 5.9 column-centimeters. After that, the articles about doping gradually increased, particularly from the year of the Tokyo Olympic Games; in 1970, the total volume was 300 column-centimeters. With a
slack period of several years after 1977, the doping-related articles has increased again especially from 1988. The highest volume, i.e. 1,352.1 column-centimeters, was recorded in 1994.

2. The volume of articles by page categories

Broken down by page categories, the sports news pages treated doping most frequently in the morning editions; of the total volume of doping-related articles, 91.2% were seen in the sports news pages (Fig. 2). In contrast, however, the proportions of the volume of doping-related articles in the evening editions were, respectively, 29.2% in the sports
Fig. 4  The volume of articles about each sport for 50 years.

Fig. 5  The volume of articles about each content for 50 years.
news pages, 50.8% in the local news pages, and 19.3% in the front pages. When the articles in both morning and evening editions were combined, 78.7% were seen in the sports news pages and 13.9% in the local news pages.

3. The volume of articles by nations

As shown in Fig. 3, the nations which were frequently treated for the doping-related articles were People’s Republic of China (12.3%), Japan (11.0%), Canada (10.7%), USA (10.1%) and Germany, including both West and East Germany (9.8%).

4. The volume of articles by the kinds of sports

Broken down by the kinds of sports (Fig. 4), track and field accounted for 25.6% of all articles concerned, followed by weight lifting (11.6%), swimming (8.5%), and then football (soccer) (5.9%); this order of the kinds of sports differed from the order based on the frequency of positive rates in doping control.

<table>
<thead>
<tr>
<th>Scandal *</th>
<th>Volume</th>
<th>Year</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ben Johnson scandal</td>
<td>707.0</td>
<td>1988</td>
<td>The Seoul Olympic Games 100m gold medalist Ben Johnson’s reaction to the doping test proved positive. He was deprived of his rank.</td>
</tr>
<tr>
<td>2 Hiroshima Asia competitions scandal</td>
<td>552.2</td>
<td>1994</td>
<td>Eleven Chinese swimmers’ reaction to the doping test proved positive in Hiroshima Asia Competitions in 1994. It was supposed a systematic offence.</td>
</tr>
<tr>
<td>3 Katrin Krabbe scandal</td>
<td>330.0</td>
<td>1992</td>
<td>World top runner Katrin Krabbe used other’s urine to mask a medicine in a doping test. She was punished but it was canceled soon. However her reaction to a next doping test proved positive. She was punished again.</td>
</tr>
<tr>
<td>4 Diego Maradona the World Cup scandal</td>
<td>287.8</td>
<td>1994</td>
<td>A Football world super star Diego Maradona’s reaction to a doping test proved positive in 1994. He pleaded ignorance as an excuse. But he punished.</td>
</tr>
<tr>
<td>5 The World Weight Lifting Championships scandal</td>
<td>279.2</td>
<td>1970</td>
<td>Nine Japanese weight lifters were disqualified from the World Weight Lifting Championships in 1970 for a stimulant test. They pleaded an unskillfull test as an excuse. But it was not accepted. However it was canceled a year later.</td>
</tr>
<tr>
<td>6 Butch Reynolds scandal</td>
<td>264.7</td>
<td>1992</td>
<td>The U.S. track and field association opposed to the international association from 400m world record holder Butch Reynolds’ doping penalty. It was mired in stalemate involving a court.</td>
</tr>
<tr>
<td>7 Ohuchi Hitoshi scandal</td>
<td>136.8</td>
<td>1974</td>
<td>A Japanese weight lifter Ohuchi Hitoshi was disqualified from the Asia Competitions in 1974. The Japanese association insisted on an unskillfull test. But it was not accepted.</td>
</tr>
<tr>
<td>8 Diego Maradona cocaine scandal</td>
<td>132.9</td>
<td>1991</td>
<td>A cocaine was detected from football superstar Diego Maradona in a doping test. He played in the Italian league. He accepted use of it and was punished.</td>
</tr>
<tr>
<td>9 Rick Demont scandal</td>
<td>111.0</td>
<td>1972</td>
<td>A gold medallist Rick Demont’s reaction to the doping test in Munich Olympic Games proved positive. He pleaded effection of asthma given by a doctor as an excuse. But it was not accepted.</td>
</tr>
<tr>
<td>10 Shimomura Eiji scandal</td>
<td>101.6</td>
<td>1984</td>
<td>A Japanese volleyball player Shimomura’s reaction to the doping test in the Los Angeles Olympic games proved positive. A detected medicine was a testosterone. The re-test proved an apperarence of a testosterone due to his constitution.</td>
</tr>
</tbody>
</table>

* Named by the authors.
tests, i.e. weight lifting, archery, tennis, wrestling and basketball (Fukushima et al., 1995).

5. The volume of articles by the contents

Broken down by the contents (Fig. 5), suspicion of doping, penalties for athletes and coaching staff, and doping control tests accounted for, respectively, 39.0%, 18.5% and 12.5%. In contrast, the articles treating morals for doping and the side-effects accounted for, respectively, 3.5% and 1.9% only. The volumes of these two kinds of contents combined were 423.0 column·centimeters, or 1.5 pages of newspaper.

6. The volume of articles about special topics

The top 10 news items according to the volume of articles are shown in Table 2. The scandal of Ben Johnson was outstanding: 707.0 column·centimeters, or 2.5 pages of newspaper.

IV Discussion

It was in August 1889 that Dyment (1984) first reported the accidental death due to doping (the use of trimethyl as a stimulant); an English cyclist died in a 700-km cycle race. But, this accident was not treated in the Asahi Shinbun. The first doping-related article in this newspaper in 1960 reported that a Danish cyclist died in the Rome Olympic Games owing to the use of roniacol of vasodilator as a stimulant; in later time, Puffy and Green (1990) mentioned this accident in detail. According to their reports and others, the athletes did not understand doping as an unfair behavior in that time and that medical doctors used roniacol to improve cardiovascular systems of patients. It was in the early 1960s that doping and prevention of athletes from its side-effects were clearly recognized. After doping was prohibited, anti-doping ethics became prevailing and the attention was given to both athletes and sporting societies.

Doping control tests were introduced in the Pre-Olympic Games held in Mexico in 1967. But, it seems that a lot of tragedies took place because of unskilled techniques in the tests. In one such case, a Japanese bronze medalist in the World Weightlifting Championships in 1970 was deprived of his rank because of suspicion of using vasodilator, but he was restored to his rank in the following year because of the unskilled test administration. Another well-known tragedy was concerned with Rick Demont, a gold medalist in the World Weightlifting Championships in 1970 was deprived of his rank because of suspicion of using medicine for asthma and was, unluckily, not to be restored because of the rule in that time: when a competitor declares the use of medicine for asthma before game the use of it in not accepted. When the present rule were applied (Nihon Suiei Renmei, 1993), Rick Demont would not be impeached and thus would be a gold medalist.

From the beginning of the 1970s, the volume of articles about doping markedly increased. The reason for this was judged to come from the introduction of doping control tests. For the decease of articles around 1980, it is natural to consider that the social interests in doping wakened down despite that doping itself was not decreased and the concerns about doping became widespread in
sporting societies.

It was clear that the volume of doping-related articles strikingly increased after 1988, when the scandal of Ben Johnson, who won men's 100-m track competition in the Seoul Olympic Games but was deprived of his rank because of suspicion of the use of anabolic steroids, took place. In 1988, the volume of doping-related articles was 802.3 column-centimeters, and 88.1% of them treated Ben Johnson's scandal. However, some writers pointed out that the penalty for Ben Johnson was a warning of the IOC to other competitors. If this was the case, some athletes knew that doping was wrong but did it.

The volume of articles about doping was the largest (1,352.1 column-centimeters, equivalent to 5 pages of newspaper) in 1994 throughout the last 50 years. Compared with the volume of articles about AIDS in the Asahi Shinbun (Hirata et al., 1995), the volume of articles about doping was 113.0% in 1990 and 79.1% in 1991, implying that doping was interested to the same extent as AIDS.

Regarding the categorized pages which treated doping, the sports pages were outstanding, accounting for 91.2% of the total in the morning editions. Matsuse (1996) pointed out that the contents of doping dealt mostly in the local news pages. But, the results of this study clarified high contribution of the sports pages to doping-related articles.

The finding that the five nations, i.e. People's Republic of China, Japan, Canada, USA and Germany, were treated for doping-related articles in the similar volume suggests that the problems of doping have not been so serious in Japan, compared with such other nations simply because the Asahi Shinbun treated the matters in Japan much more than those in other nations. The volume of articles for these five nations combined exceeded 50% of the total, though there is a possibility that Japanese newspapers including the Asahi Sinbun perjudiced or neglected the issues in the nations of Africa, Latin America (except for Argentina) and West Europe (except for Germany).

Regarding the differences of doping-related articles by the kinds of sports, this study found out that the top three were track and field, weightlifting and swimming, though this order was not consistent with the order of sports according to the positive reaction to the doping tests (Fukushima et al., 1995).

The final discussion focuses on the volume of contents. It was clear that doping suspicions and/or the relevant scandals were treated in large volume. This was consistent with warning of Ohta et al. (1996) that degeneracy of morals, like doping actions, tends to trigger the increase of such social problems as the use of narcotic drugs and stimulants. Therefore, it is necessary to deal with doping as a problem of our society. It is suggested that newspapers treat more doping-related articles from the viewpoints of morals and side-effects and make efforts to root doping out.

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スポーツ競技者の不正薬物使用（ドーピング）に関する報道の研究—、戦後50年間の朝日新聞の記事分析—

蘭 和真* 大森 正英* 岩田 弘敏**

本研究の目的は、スポーツ競技者のドーピングが社会的にどのように認識されてきたのかを明らかにすることである。方法は戦後50年間の朝日新聞の報道記事を分析し、その量と内容を検討することによって行った。結果から次のことが考察された。

ドーピング関連の初めて記事は、1960年のローマオリンピックでデンマークの自転車選手が興奮剤を使用したことによって死亡したというものであった。また、ドーピングテストが初めて実施されたのは1967年のメキシコプレオリンピックであった。ドーピングテストにかなりの社会的な関心が集まったと考えられ、記事量が1970年から急増している。記事量に関しては、1988年のソウルオリンピックでのベン・ジョンソン事件を境に爆発的な増加がみられた。この事件が社会の関心を引きつける引き金になったものと推察された。ベン・ジョンソン事件に関連する記事量は707.0コラム・センチメートルで年間記事量の88.1%を占めた。これは新聞紙面の約2.5ページに相当する量である。この量の多さから、この事件は今世紀最大のスポーツ界における事件であると考えられた。年別の記事量では、調査期間の1945年～1994年の中で1994年の記事量が最大で、1,352.1コラム・センチメートルであった。近年の記事量の多さ、掲載紙面の多様化、内容等から、ドーピングに対する社会的な関心の高さを読みとることができた。また、ドーピング問題はスポーツ界だけの問題ではなく、社会問題の一つとして考慮していく必要性が推察される。ドーピング関連記事の内容別の記事量では、ドーピング疑惑に関する記事と処罰に関する記事が圧倒的に多く、いわゆる事件としての報道が中心であり、ドーピング問題の根幹に関わる倫理的な記事や副作用に関わる記事は比較的少なかった。この点に関しては今後、アンチ・ドーピング活動にも関連することから、多面的に取り上げられることが望まれる。