Research project DR/00/044: nEWS on EWS

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nEWS on EWS
Warnings for dangerous drugs: analysis of the early warning system in Belgium

Purpose of the study and methodology

The project ‘nEWS on EWS’ analyzes how newsmedia inform the public about new dangerous illicit drugs that are detected by the Early Warning System in Belgium (BEWS). Together with an analysis of the most important characteristics (style and content) of these messages, we take a look at the possible influences of these news messages on the perception and knowledge of the general public and drug users in particular.

Four objectives are put forward in this research project

First of all, a literature review investigates the (possible) role of news coverage in creating an awareness about the risks of using drugs, as well as the quality standards of risk information, the effectiveness of health-related messages regarding to drugs and the relationship between the characteristics of messages and the effects they have on knowledge, attitude and behavior of its receivers. The literature review also contains information about the implementation of Early Warning Systems and communication systems on new dangerous illicit drugs in different countries. Based on different theories about health communication and media effects, we construct a theoretical framework which gives us better insight in how to evaluate and optimize early warning systems.

Secondly, we conduct a content analysis on warning messages about illicit drugs. We check how many messages are published in the news media, how the news media process these messages and how they communicate it to their public. Both newspapers, television news items and press releases of the Belgian press agency Belga are analyzed for both parts of the country. In the content analysis we pay attention to both formal al well as content related
characteristics of the message (news value, framing, tone, themes, actors and criteria for good information quality). The content analysis helps us to find out whether the final newspaper article differs from the press release of Belga. This provides us a better understanding of the information flows of the EWS in Belgium.

In the Dutch-speaking part of Belgium we analyzed articles in the newspapers De Standaard, De Morgen, Het Laatste Nieuws, Metro, Het Nieuwsblad, Het Volk, Het Belang van Limburg en De Gazet van Antwerpen. In the French-speaking part of the country six newspaper titles were selected: Le Soir, La Libre Belgique, La Dernière Heure, Métro, the newspapers of the group Vers l’Avenir and of the group Sud Presse. In total we gathered 132 articles in Dutch and 67 articles in French for the period of January 2003 until March 2007. (Since 2003 the EWS in Belgium was installed properly and warning messages are sent out systematically). In the selection of the newspaper titles we tried to have a good mix of the different publishing groups in Belgium and we incorporated both so-called popular as well as quality newspapers. The selected titles have a large coverage and have a broad and various public.

Concerning the television news, we gathered 15 relevant news items for the period of January 2003 until December 2005: 8 items on the Dutch-speaking channels EEN and VTM and 7 items on the French-speaking channels RTBF and RTL-TVI.


Thirdly, we investigate how the receivers perceive and evaluate the news messages. We look at how they receive the information, what they do with the information, whether or not they think the EWS is a useful system and what they would like to change about the system in order to optimize it. We achieve this through focus group interviews with 8 important target groups, in both parts of the country. We conducted 10 focus groups (5 Dutch-speaking and 5 French-speaking) with target groups in the ‘general public’: minus 18 year olds, 18-25 year olds, drug users in the festival scene, drug users in the party scene and parents/adults. Besides that, we conducted 6 focus groups with professionals (3 Dutch-speaking and 3 French-speaking): professionals in the field of health care, professionals in the field of police or justice and journalists.

Finally, using a telephone survey we measure the actual reach of warning messages among the general public, we want to find out if specific target groups are sufficiently reached and how the public perceives these warnings. The questionnaire will be administered at the moment a drug related incident occurs and a warning message is sent out. The following criteria were set up as preconditions in order to administer the telephone survey:

- geographical coverage (preferably on national level)
- impact of the incident (preferably a large impact)
- large target public (substance that is common and largely known among the public)
If the telephone survey could not be administered by the end of August 2007, it was agreed that only minimal criteria had to be taken into account: at least one news message should be published or broadcast in each part of the county in order to start the telephone survey. On the 29th of November the IPH sent out a warning about high dosed XTC pills and the minimal criteria would be applied. During the following days, the survey was administered among 1717 respondents, 781 French-speaking and 936 Dutch-speaking citizens.

**Results of the literature study: theoretical framework**

Insights from the agenda setting theory, framing theory, dual processing theories, the cultivation theory and the social learning theory are put together in the ‘integrated media effect framework’. This theoretical framework provides us a better understanding in how an early warning system should be constructed and how we can improve an existing system. The integrated media effect framework emphasizes the importance of agenda setting in the early stage of preventive communication. Besides that, the framework shows that the framing of messages is essential in how the message is interpreted and perceived. Agenda setting and framing do not only have an influence on the individual behaviour of the receiver, but these theories can have an impact as well on the public opinion towards communication about drugs and drug policy. Finally, this theoretical framework helps us to develop ideas for specific applications concerning early warning systems that use the mass media to diffuse messages.

An effective warning message should respond to both the cognitive as well as the affective component of risk perception. The cognitive part can be realized by giving useful sufficient information about different aspects of substance use. Attention should not only be given to the criminal aspect of illicit substance use, but also for the social, economic, cultural and health-related aspects. The use of broad ‘thematic’ framing with enough background information about the issue is considered as most appropriate. In order to influence the affective component, the warning message should appeal to the emotion of the receiver. Incorporating news values such as personalisation and (cultural) proximity in the message and emphasizing the personal significance of the warning helps achieving this. Yet, the messages should continue to be objective and information should not be distorted in order to prevent moral panics. Depending on the personal involvement of the target groups, a positive or a negative frame should be used. A preceding investigation of the characteristics of the target groups is therefore very useful.

The warning message should not simply call on avoiding the use of the dangerous substance concerned. Specific instructions on what to do if you or someone you know (accidentally) has taken the substance, and guidelines of how to prevent problems with (il)legal drugs make the warning message more useful. The public is taught immediately the good example of what to do in a certain situation and according to the social learning theory, this enhances the performance of the provoked behaviour. Additionally, the ‘bad’ examples of people using the
dangerous substance, should not be portrayed as attractive or successful persons, since this
could encourage people more to imitate the drug taking behaviour.
Effective warning messages should ‘cultivate’ an attitude of caution and resistance towards
illegal and possibly dangerous substances. Taking drugs should repeatedly be presented as an
unattractive and possibly dangerous act, but the risk of health-related or other problems
should always be presented in an objective and credible way. Drug users should not be
presented in a stereotyped way, but as normal everyday persons so that others have the
impression that drug-related incidents could happen to everyone, also to themselves or
someone in their social network.

Apart from the content-related characteristics, an effective warning message should also be
presented in an attractive lay-out to its readers or viewers. Especially for newspaper articles
attention should be paid to formal characteristics such as the headline, whether a picture is
added or not and under which section and on what page the message can be published. The
article should strike the eye of the reader and invite him or her to read further.

An effective and successful Early Warning System should have sufficient and reliable sources
of information. False alarms need to be avoided by checking the original source of
information and by searching for additional sources. A triangulation of data collection
methods is an effective way of gathering information and sending out reliable warning
messages.
A warning message in the media can have an influence on attitudes and behaviour towards
substance use, but a system of ‘multi-channel’ warning probably has more effect. If the Early
Warning Systems and its messages in the mass media are supported by other community
instances such as schools or youth movements and by significant persons such as teachers or
parents, they will have more effect on young people’s attitudes and behaviour because people
will also gather information within their social network to build up an opinion about a certain
issue.

Results content analysis

Newspaper articles

Most newspaper articles are small and the visual support (images) is limited. As a result, most
the articles will not immediately strike the reader’s attention. Nevertheless, the position of the
articles is generally favourable, which means they are often published in the first section of
the newspaper and often on the odd pages. Because of this favourable position, we can
assume the articles could be noticed by a large public of readers, despite the limited size of
the text and title.

A warning messages with high news value does not result is a higher number of newspaper
articles (more media coverage) compared to warning messages with lower news value.
Newspapers do tend to publish more articles if the incident took place in their own region
(Dutch-speaking part or French-speaking part of Belgium), but furthermore there is no
relation between news value and media coverage. If the incident is more severe (has more
impact) and if there is personalization, the articles are significantly larger and longer.

Episodic framing is most common in the newspaper coverage; in most cases only simple
factual information is given without in-depth (background) information or without talking
about related themes. The tone of the articles is rather negative. Drug users are generally
presented as ‘victims’ and the substances concerned are depicted as a ‘danger for one’s physical health’. The themes (subjects) that are most frequently presented in the articles are ‘negative effects/dangers’ and ‘formal characteristics’. MDMA (XTC) is the substance that is mentioned most often. The kind of incident that occurs most often is a seizure of XTC-pills with an overdose of MDMA. Specific warnings or advices for (potential) drug users and victims are hard to find. Also references to professional drug-related organizations (for medical/psychological assistance or information) are hardly ever mentioned. If any specific warning is given, in most cases it is the standardized warning of the IPH that they publish at the bottom of their warning messages. Often it is literally copied in the newspaper articles: “we should warn again for the dangers of the use of illegal substances. Because the production of these substances takes places in an illegal circuit and can not be controlled, drug users can never know exactly what they consume”.

In the newspaper articles organizations are cited or paraphrased more often than persons, which creates a rather distant impression and reduces empathy among the readers. The organizations that are mentioned most often are the IPH (Institute for Public Health) and the Ministry of Public Health. Concerning persons we notice that ‘drug users’ and ‘victims’ are most likely to be mentioned while professionals such as scientists or laboratory employees are more likely to be cited or paraphrased.

Concerning the readability score of the articles, we conclude they can be categorized as ‘difficult’. This is because of the frequent use of long (difficult) words, not because of the length of the sentences. The ‘human interest’ in the newspaper articles is very low and belong to the category of ‘boring/scientific texts’, which is very unusual for a newspaper article. As a result, readers will be likely to lose their interest in the article if they start to read.

**Television news**

The selected television news items are generally short and the images mostly show scientific experts in the field of drug use or people going out in a discotheque. The experts are generally recognizable and give an interview. On the other hand, the people in the party scene are generally used as ‘background image’, while a voice-over explains what the warning message is about. In the newspapers, the scientific experts also play a more prominent role in the message compared to the hand-on expert such as drug users or party people. If any objects are shown, these are pills.

Like in the newspaper articles, also in the television news items the emphasis is on the negative aspects of drugs and the dangers of the product for one’s physical health. The attention given to the social, psychological and judicial consequences of substance use is very limited. The victims are always portrayed as sick persons, never as criminals or reckless persons. Compared to the newspaper articles, there is more attention to the recreational aspect of substance use in the television news items. Probably this is related to the fact that often people in a party scene are shown in the footage. In general, little background information is given. Most subjects are not analyzed in-depth. Therefore, we conclude the television news items are episodically framed as well.

The television news items tend to copy the content of the press releases quite rigorously. We can conclude this because both in the television items and in the press releases the same subjects are mentioned most frequently, namely ‘negative effects/dangers’, ‘formal
characteristics’ and ‘chemical composition’. Moreover, in both types of content MDMA (XTC) is the most ‘popular’ substance.

In one out of three television news items some advice or preventive information is given to the viewers. Yet, in most cases it is simply the standardized warning of the IPH which is rather general and meaningless. If a viewer is referred to a professional organization (for further assistance or information), no contact information is given. As a result, the reference is rather useless.

Press releases of Belga

The findings concerning the content related characteristics of the press releases are very similar to the findings for the newspaper articles and the television news items. This is an indication that the editorial boards of the newspapers and television channels do not change much about the press releases of Belga. In the next paragraph, this is further investigated.

Unusually high dosed MDMA (XTC) is the most frequent reason to send out a warning message. A new substance that has caused deaths is rare. Yet, the news value of a high dosed substance is definitely lower than the news value of a message about a substance that causes death or other serious and permanent injuries. The most common sources of information for press releases are seizures by the police and laboratory analyses.

In the press releases, a lot of attention is given to the negative effects and dangers for one’s physical health. About the possible social, psychological or judicial problems, the press releases remain (almost) silent. The same trend can be noticed in the newspaper articles and the television news items. The press releases are characterized by episodic framing too. In about half of the press releases MDMA (XTC) is mentioned. Besides MDMA there is a large variety of substances that are only mentioned once or twice (for example CPP, PMA, cocaine, atropine, buprenorphine, hydroxyzine, …). We observe the same pattern in the newspaper articles and the television news items. Another similarity is the press releases’ limited attention for advices and references to professional organizations. If any advice is given, in most cases it is the general warning of the IPH. Any contact information of the professional organizations is never incorporated.

The most important information sources for press releases are the government and scientific experts. Professionals in the field and hand-on experts such as drug users are rarely addressed as a source of information. The same can be observed for the newspaper articles and the television news items. A broader range of information sources should be used.

Comparison between newspaper articles and the press releases of Belga

In about one out of three newspaper articles, 50% of the sentences are copied more or less literally from the press release. This is an additional indication that the journalists rely strongly on the information in the Belga press release and do not tend to consult other sources when they are working on the article. If the content of the newspaper articles should be changed, it seems to be the best option to modify the content of the press releases. Because the journalists tend to copy the press releases, changes will be incorporated in the final newspaper article.
If some information is added, deleted or extended, this can have an influence on the reader’s interpretation of the message. For example by deleting contextual information, the message can become over-simplified or dramatic. If any information is added, it is mostly about negative effects and dangers. If any information is deleted, it is often preventive information (often the standardized warning of the IPH).

If the journalists receive the press release of Belga, the process this text according to the same criteria as they process other press releases about other subjects. To them, the news value of the message is more important than the preventive value. Based on these research findings, we conclude there are two important things to do. First of all we investigate together with the IPH what type of information is most useful to communicate to a broad public and what language and structure should be used. Secondly we discuss with the journalists (especially the journalist of Belga) how they should process the preventive information of the IPH and what type of information they certainly should incorporate.

**Results focus group interviews**

**General population**

It is practically impossible to write a single warning message that is appropriate for every target group because every target group interprets the message in a different way. The drug users share the opinion that the information in the warning messages is little useful and that the language is nor objective nor neutral. They ask for more ‘harm reduction’ information. According to the non-users, a more dramatic tone should be used in the message because they think this frightens people and deters them from using illegal drugs. Some non-users feel shocked by the ‘harm reduction’ information because they think this type of information will encourage readers to experiment with drugs.

The public that should receive the messages is very heterogeneous and every target group has its own reasons to read (or not read) the warning message. The adolescent that do not consume any drugs and the parents read the warnings in the first place simply to know what is going on in the world. To them, it is the same as reading another news message. The more experienced drug users mainly read the messages because they feel concerned with the subject of substance use. Among the novice (experimental) users, the need for warning messages is the highest. Therefore, they will be more likely to notice the warnings. Because of their limited experience with drugs and because they do not get in touch with other drug users that often, they have less alternative information channels to inform themselves about what kind of substances can be found on the market.

The preventive impact on the target groups differs very much according to the characteristics of every group. Besides the intended impact, a message can have non-intentional effects as well. For example among the parents, a message about dangerous drugs can enhance feelings of worry or insecurity. Among the drug users, their distrust towards government organizations could be enhanced if they consider the messages as subjective or biased. A subgroup of drug users (mostly young users in an experimental phase) considers risk behaviour as a way of life. As a result, the messages may have an opposite effect on these users and could encourage them to experiment instead of deter them from substance use.

**Professionals**
The professionals in the field of health care and security think the EWS warning messages are mostly relevant to drug users, and not to the general public. They think the warning messages should be better adapted to the information needs of drug users and they think a ‘harm reduction’ approach is most appropriate. The professionals ask for more targeted communication; information should be diffused through a larger variety of channels, also channels that are targeted at specific groups within the general population. Examples are posters at parties or dance-events, a website, an online forum, boomerang postcards, etcetera. This way, both the content as well as the lay-out can be adapted to the information needs of the specific target group.

The participants are aware that it is not easy to find a good balance between speed (send out the warning as soon as possible) and accuracy (make sure the information is complete and reliable). Because of some practical considerations and limited time often only the most essential information remains and is send out. As a result, most newspaper articles are very short and technical. Some professionals think these short messages without background information do not offer an interpretative framework. Therefore, the messages may have an inverse effect on some receivers and may encourage them to experiment with illegal substances.

The professionals, especially those in the fields of police and law, need a more structured organization of the information flows. It seems a good idea to them to appoint a central contact person for each field or each organization. These contact persons can gather the information of the IPH and diffuse it to their colleagues who need it. It is important to stay alert for information overload, according to the professionals. If the frequency of the warnings is too high, the professionals will be less likely to notice the message and the news value will decrease whereas it will be less interesting to publish the message.

Like the general public, the professionals too agree that more attention should be given to information from the field (bottom-up information). Especially professionals in the field of health care are convinced that the drug users themselves are often well aware of what can be found on the market and what the characteristics are of the substances. Drug users could deliver interesting and useful information, if the information gathering would be more structured and can be verified.

In all focus groups with professionals the technical-scientific language use is criticized. Especially journalists consider this as negative because they often have difficulties in understanding the jargon and because very little attention is given to human interest. The Ministry of Public Health could (according to the journalists) use a more simple language which is more adapted to their information needs. Moreover, the Ministry of Public Health could add more background information. This could help the journalists in processing the press release to an interesting article within a limited period of time. In both cases it would be useful to use the system of Belga Direct. The journalists also emphasize the importance of a clear reference (contact information) to experts and/or a spokesperson of the Ministry of Public Health. At the moment some journalists experience problems in getting in touch with an expert in order to obtain addition information. As a result, they are less likely to publish an extended article based on the press release.

The journalists indicate that the moment when the warning message is sent out to the press is very important. If the warning arrives at their desk before noon, the change it will be published in the newspapers is a lot higher compared to press releases that arrive in the (late)
afternoon. The journalists think it would be a good idea if the IPH would send a ‘reminder’ to the press one day after they sent out the warning message. This way, the warning is given a second chance to be published in the newspaper. If the text of the warning is only finished by the (late) afternoon, the journalists propose to wait and send it out the next morning.

Of course it first should be investigated whether the organization, (financial) means and processes within the Ministry of Public Health make it possible to change some procedures. Possibly, legal constraints impede to install some changes.

**Results of the telephone survey**

Little respondents have noticed the warning message. We have two explanations for this result. On the one hand the media coverage is limited, especially in the French-speaking part of Belgium where only one newspaper article was published. In the Dutch-speaking part, 5 short articles were published. On the other hand, the interest in and need for this type of information is limited among the public that is reached by the general newspapers. The majority of the respondents that have heard about the warning indicate that they do not feel concerned and actually do not need the information.

Yet, the group of respondents that do feel concerned about the subject of dangerous drugs is still an important group; about one out of four respondents do feel concerned. Often these are drug users or persons that have a close friend or relative that uses drugs. This group considers the information in the warning message as relevant, but the telephone survey reveals that the actual way of diffusing warning messages (through the mass media) does not sufficiently reach those persons that feel concerned. The profession of the respondents does not seem to have an impact on whether or not they heard about the warning; those whose jobs are directly or indirectly related to drug use do not have read the message significantly more than respondents with other types of jobs.

The interested (concerned) respondents who have received the warning message, indicated they consider the information in the message as clear, useful and complete.

A majority of the respondents, also those who do not feel concerned with the subject of dangerous drugs, agree it is useful to warn the public through mass media channels if a dangerous drug is on the market. Even those respondents who think that the warning messages could enhance feelings of worry or insecurity, still think it is useful to warn because they consider it as necessary to alarm the public if some dangerous substance is found.

The results of the telephone survey indicate that those respondents who feel most concerned with the subject of dangerous drugs (either as a user or because they know users among their friends or family), are least likely to follow the daily news. Therefore, we wonder if it is useful to warn the public using the ‘typical’ mass media. If the warning messages is communicated through the mass media, those who need the information the most are insufficiently reached.

Further analysis reveals that the correlation between involvement with drug issues and having interest in the daily news can be explained by intervening socio-demographic variables. Those who are more involved with drug issues are generally lower educated. Socio-demographic variables such as education level explain the respondents’ interests for certain issues and
explain their media use. This way, we can conclude though which media the different target groups (concerned and non-concerned) can be reached most effectively.

Because some target groups need the information in the warning messages more than others (this need for information is linked with the respondent’s personal involvement with drug issues), it is important to find out what to possibilities are to diffuse the warning messages though a larger variety of communication channels that are more targeted at a specific group. Moreover, this would create possibilities to adapt the content and lay-out of the message to the needs of these specific groups, especially those who feel concerned with the issue of dangerous drugs. The conclusion that the majority of the respondents who received the warning message are little interested in this information and do not feel concerned, indicates that it should be considered to diffuse the warning message through additional communication channels.

**Recommendations**

The communication theories mentioned earlier (see: results literature study) show how a certain message can have an influence on its receivers. We can use these insights in order to obtain a better understanding of which elements are necessary in a good warning message. If the subject of ‘dangerous drugs’ is high in the public agenda, messages about this subject will get more attention in the (mass) media, and vice versa. If politicians and other policymakers communicate regularly with the media about dangerous drugs, the media makers will be more aware of this problem and will give more attention to the subject. As a result, the public feels more concerned with the issue. Yet, information overload and sensationalism should be avoided because this could undermine the policymakers’ credibility.

In the focus groups with adolescents and drug users it is suggested to use new media such as the internet or SMS to diffuse warning messages. A broad website could be developed where both users (bottom-up) as well as scientists or professionals in the field of health care (top down) can exchange information. Besides that, the suggestion was made to use more face-to-face information transmission, for example an information evening could be organized or information stands at parties or festivals could be established. In all focus group it is emphasized that hand-on experts such as drug users should get more involved in the diffusion of information about dangerous drugs, because they are considered to be credible. According to the focus group participants, drug users or professionals in the field know what they are talking about.

Finally we have several indications (both in the focus groups as well as in the telephone survey) that diffusing warning messages through the mass media (mainly newspapers) is too limited. It is suggested to use more target group specific communication (narrow-casting). At the moment, those target groups who need the information the most (drug users) are clearly insufficiently reached.

Below, we sum up the most important recommendations.

a) Media and other information channels
  - develop a broad website (with online forum) where professionals and hand-on experts (drug users) can exchange information
  - install information stands on parties, festivals and other dance-events (in cooperation with the subfocal points)
- use more communication channels, not only the mass media (use channels that are aimed at specific target groups)
- the first days after a warning was sent out, an expert of spokesperson should be available at all time (via mobile phone) to answer questions of journalists or other persons involved (improving the current guard system)
- encourage two-way communication by diffusing an (online) template the professionals in the field can fill in if they would like to pass information to the IPH

b) Type of warning messages (content related characteristics)
- more involvement of hand-on experts in the press releases (e.g: statement, interview, quote)
- if the IPH has sent a warning message to the media in the (late) afternoon: send a reminder the next morning (with more background information)
- below every press release and article it is necessary to give contact information of professional organizations such as VAD, Eurotox, the Druglijn or Infor-Drogues

c) Language use and structure
- Use a language which is more lively (with more human interest), for example by adding a quote of a drug user or a victim