

Title

STAKEHOLDERS AWARENESS RAISING PROGRAMS
ON THE SAFETY AND SECURITY OF RADIOACTIVE
SOURCES: CHALLENGES AND OPPORTUNITIES
A CASE REVIEW OF ETHIOPIAN RADIATION
PROTECTION CHALLENGES AND AUTHORITY
STAKEHOLDER COMMUNICATION AND CONSULTATION
PRACTICES

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Abstract

Radiation sources safety and security has become a concern owing to increased use of sources in many facilities and practices. The aim of this study was to investigate awareness campaigns challenges and opportunities that boost outreach activities success. Qualitative approach was used for the study. Data was collected by Focus Group Discussion and Interviews methods. The study population consisted of radiation professionals from Ethiopian Radiation Protection Authority (FGD 8) and individuals from public (Interviewees 5). Results of this study confirmed that the Authority encounters critical challenges in its awareness campaign efforts. Weak institutional capacity and limited involvement of potential stakeholders are ranked among others to be acute challenges. The findings also revealed that the availability of private and public organizational arrangements to work with, taking advantages of the social cultural and religious events to disseminate awareness contents, flourishing traditional electronic media, use of social media platforms and collaborative outreach undertakings all were noted as opportunities to enhance awareness campaigns gains.

CHAPTER ONE

1.1 Introduction

Public awareness campaigns on the safety and security of radioactive sources aim at reaching out various target audiences and disseminate tailor-made contents to specific recipients or the public. Information sharing or delivery could involve conducting multi-agency and many-sided exchange among federal, state, local, tribal, and territorial levels of government (Centers for Disease Control and Prevention, 2018). Target audiences could be audience-specific or community-wide. Information sharing often extends to the large population. With over 110 million people in the country, awareness raising campaigns are not that simple task. The debility to maximize awareness raising endeavors by the Authority is a persistent challenge to be underlined. Inaccessibility problems to multiple media outlets by the public is as well an enduring impediment. Discouraging leadership commitment poses problems limiting the direct involvement of decision makers at all levels. Perceived wrong perceptions and bias about radiation and nuclear science narrations hinder outreach programs importance. Insubstantial media participation considerably affects outreach efforts in accessing the widest target audiences possible. Limited involvement of potential stakeholders exacerbated by

unintegrated information delivery strategies creates disconnected voices of a wide range of actors. Despite the awareness raising challenges encountered by the Authority, exploring opportunities that help facilitate outreach campaigns is of paramount importance. The increment in radiation and nuclear technologies use, presence of social networks, public and private institutional arrangements and the flourishing traditional electronic media (TV and Radio) and social media platform across the country, if properly exploited, could initiate interest in the public to be attentive of awareness programs. Collaborative outreach programs with stakeholders can create a force that eventually foster change in awareness activities and level understanding.

1.2 Statement of the problem

Stakeholders' awareness program is not a full-fledged process. Weak institutional capacity, discouraging leadership commitment, perceived wrong perceptions about radiation, and limited involvement of stakeholders are all persistent challenges of public outreach efforts.

1.3 Aim It aims at studying the awareness-raising challenges and opportunities that make outreach activities promising.

1.3.1 Specific Objectives

- To examine potential challenges encountering awareness raising efforts
- To investigate opportunities that facilitate conceivable awareness-raising programs.

1.4 Research questions

- What stakeholder-awareness program challenges are there?
- What opportunities that positively influence awareness programs are there?

1.5 Significance of the study

The study is crucially important as it unfolds the very challenges encountering stakeholder awareness programs and reveals opportunities that help facilitate public outreach efforts.

1.6 Scope of the study

This study is merely concerned to examine the Authority's actual awareness-raising program challenges and explore the favorable factors that enhance outreach programs

CHAPTER TWO

2.1 Literature Review

Undervaluing the potential harms of radioactive sources on people and the environment and applicable safety and security measures could bring significant losses affecting the Authority's regulatory activities, target audiences and the public in many ways. The technical complexity and the low level of radiation safety knowledge must clearly and carefully be addressed to stakeholders, target audiences and the public to adopt new thinking on radioactive sources safety and security (Aysu Zekioğlu & Şule Parlar, 2021). The public has inadequate knowledge and to a considerable extent ambiguity when it comes to issues involving nuclear and radiation safety (<https://www.iaea.org/topics/communicating-with-stakeholders-and-the-public>). Awareness campaigns must therefore be committed to address the actual knowledge gap present in the public and should inspire people in an engaging way to facilitate a sense of public ownership (<https://www.iaea.org/topics/communicating-with-stakeholders-and-the-public>). In this way comprehensive understanding which eventually ensures the safety, and security of the intended audiences from unnecessary radiation exposure can be created. In spite of the critical awareness-raising challenges like capacity constraints, perceived wrong perceptions about radioactive sources, awareness-programs prove to be ideal strategies in having informed public about the harms and safety and security of radioactive sources. Communication works can help reduce the risk of misunderstanding fed by fear and rumor and consequently increase safety (IAEA, 1999).

Awareness campaigns often encounter problems. The critical difficulties involve weak institutional capacity, inaccessibility to multiple media outlets by the intended public, insubstantial media participation in awareness efforts and limited involvement of potential stakeholders. Challenges tend to be context-specific. Very often publications and tailor-made messages reach wrong audiences. Reaching audiences based on context is expensive and not particularly

effective as media planners and media buyers are only trained to buy audiences based on the media they consume (<https://www.adexchanger.com/data-driven-thinking/10-reasons-why-advertising-campaigns-reach-the-wrong-audience/>). Failure to identify target audiences to be reached out is considered as another entanglement for awareness operations (European Union Regional Development Fund). Crafting inappropriate and not-audience- focused-messages could negatively influence the comprehension and acceptance of contents delivered. Adapting message delivery in terms of context specific audiences while addressing cultural and accessibility needs with concise, prompt, accurate, information and delivering with understanding help reach more people and delivered messages can be accepted, understood, and acted upon (U.S Department of Health and Human Services, Centers for Disease Control, and Prevention, 2018).. Awareness messages may sometimes turn out to be argumentative, threatening, or worrying inspired by technical and erroneous beliefs before audiences and may halt campaign progress. This can adversely impact the public not to fully trust the scientific thoughts and practices held by the academic world (Marshall Alan, 2005).

Insufficiency in employing right communication tools or messenger often complicate clear message delivery and can threaten awareness projects effectiveness and efficiency. “One of the major challenges in developing and executing communication plans is to select the best vehicles for delivering any given message to and from employees. With so many choices, such as face-to-face communication, electronic media, meetings, printed materials and webinars, the decision becomes quite complex” Managing Organizational Communication <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/managingorganizationalcommunication.aspx>

The Authority, in partnership with stakeholders, has to think thoroughly about the target audiences and public interests the sayings of which contribute a lot for the success of awareness program objectives. Engaging with the public, stakeholders and target audiences in a true dialogue and collaborative approach facilitate outreach-undertakings with a new understanding of purpose (IAEA, 2017). Participatory awareness campaigns signify stakeholders’ desire for a more noticeable say. It helps build and maintain stakeholders and partners relationship with the Authority (Ebru Uzunoğlu, Ferah Onat, 2012). Deepening strategic professional and technical collaboration with relevant actors leverages awareness campaign gains. Integration of efforts with partner agencies and stakeholders brings not only resilient synergies but also helps mobilize resources for sustainable awareness campaigns. It can help maximize trusted safety and security information delivery and reachability of contents by desired potential audiences.

I. METHODOLOGY

The methodology used for this brief study was qualitative approach. Data were collected using Focused Group Discussion with Open-ended leading questions, interviews and document analysis. FGD participants of the study (8) comprise mostly senior, experienced and well-educated professionals holding masters and bachelor’s degree from Ethiopian Radiation Protection Authority and interviewees (5) from the public. Data gathered through FGD and Interview was analyzed through set steps-raw data organization, identification of themes attitudes and behaviors, amalgamation of core issues and interpretation of meanings, which detail the findings.

IV. CHAPTER FOUR

4.1 Discussion and Results

The findings of the study showed that there were different challenges that influenced radioactive sources safety and security awareness-raising efforts. Most of the participants who took part in this study also explained that there are remarkable opportunities that, if exploited, could dramatically enhance awareness campaign achievements. Weak institutional capability like unpredictable outreach programs and ineffectuality in coping up with the dynamic nature of radiation and nuclear science developments were repeatedly confirmed by respondents to be persistent obstacles of awareness undertakings. Media expenditure and budgetary constraints and inadequacy in competent personnel to sustainably carry out awareness programs were stressed to be common problems. Failure to provide trainings by higher learning institutes in their capacities, insufficient channel accessibility options by the public to get in touch with awareness-raising programs were challenges disclosed though some respondents upheld the view that less efforts were exerted to exploit available media outlets in order to reach out relevant audiences. Nearly all media were noted to be business oriented and this trend was remarked to have influenced radioactive sources safety and security issues media coverage. Opinions suggested show that media are labelled to prioritize political, economic, social and emergency

issues as their routine coverage trend. Radiation harms, in practice, are not easily seen because of which media are not much interested and they virtually opt to deal with other areas of focus.. Journalists and media leaders were blamed for having inadequate understanding about radiation and nuclear safety and security and thus might not as such be fascinated by contents, topics and awareness programs. Collaborative work limitations with media centers was underlined to have contributed to the ineffectiveness of awareness programs. It was also emphasized that there is limited understanding about the authority's missions and critical technical knowledge about radiation and nuclear science particularly by front-runner leaders in public agencies to which the authority is accountable (IAEA Safety Standards for protecting people and the environment, 2017). Incompetence to integrate efforts of awareness responsibilities and negligence in addressing the knowledge gap that is often seen in the public and potential stakeholders were noted to be barriers often encountered. Respondents further explained that the erroneous attitude held by the public, some stakeholders and collaborates that radiation and nuclear issues are directly related with mass destructive weapons may not draw audiences' interest. The widely held belief radiation and nuclear technologies are potentially life threatening is believed to pose a challenge. However, this perspective was confronted with the view that since the public has little understanding about radiation and nuclear issues wrong perceptions could not be conceived to be a problem. Besides, as noted by participants, limited public exposure and access to radiation technologies practical uses might not bring the curiosity of targeted audiences. Participants further pointed out that both undermining and exaggerating the harms caused by the radioactive sources could lead to unresponsiveness to awareness activities. Potential stakeholders were criticized for not involving in awareness campaigns launched by the authority despite the fact that they have many possible options to contribute their part in programs designed for this purpose. Service providers, media, private and public agencies, local higher learning institutes and international partners that are believed to have a lot to do with awareness issues were said to have not shown initiative to play roles demanded from them. Awareness-raising programs, even within the authority's departmental units, did not as such enjoy equal treatment like the technical regulatory programs. The participants mentioned that nowadays, radioactive sources use in Ethiopia is increasing and this could inspire the need for understanding about radioactive sources safety and security in the public. Exploiting available opportunities to speed up awareness-raising programs remains an important step. Public and private institutional arrangements such as health extension networks, schools, socially mobilized groups / unions like 'Ekub', 'Edir' and cultural and religious events by means of which awareness-raising efforts can be changed into concrete practicality were praised to be prominent opportunities. This effort can bring a new wave of social networks and audiences. Currently flourishing TV and Radio media were credited as promising awareness campaign opportunities that support outreach activities to be impressively successful. Cooperative works were commended to be allowing potential stakeholders to participate in diverse ways. Collaborative efforts with international and national agencies can help awareness actions to address knowledge gaps on radiation safety and security at community level. A range of partnering arrangements with stakeholders can be practical the usual ones being government organizations such as local and regional units and non-governmental agencies (OECD, 2015). It was as well indicated that extensive use of social media platforms can promote awareness effectiveness (Zerfass, A., Moreno, A., Tench, R., Verčič, D., & Verhoeven, 2013). The Internet has attained a status of being social forum and medium for community interaction allowing live chats and responses in marketing communications and opening the opportunity to gain customer insights (Ebru Uzunoğlu, Ferah Onat, 2012).

V. CONCLUSION AND RECOMMENDATION

9.1 Conclusion

Stakeholders' awareness-raising programs on the safety and security of radioactive sources under goes through diverse challenges. Equally important, there are wonderful opportunities the Authority should be daring to use accessible chances for successful awareness campaign accomplishments. Collaborative awareness campaigns also create varied synergies to skillfully and competently run awareness programs and reach out diverse audiences.

9.2 Recommendation

- Identifying awareness-raising challenges and tackling them skillfully should remain in the forefront for better and sustainable awareness achievements
- Exploiting available awareness-raising opportunities could help to maintain sustained effort to educate target audiences and boost public awareness about radioactive sources safety and security

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