

Mandatory reporting of work accidents: difficulties and suggestions by healthcare professionals in Fortaleza, Ceará, Brazil

Notificação compulsória de acidentes de trabalho: dificuldades e sugestões dos profissionais de saúde em Fortaleza, Ceará

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ABSTRACT | Background: Work accident (WA) reports are a relevant public health tool as they afford effective knowledge on the actual situation of workers cared within the Unified Health System (Sistema Único de Saúde — SUS). **Objective:** To analyze the difficulties posed by mandatory WA reporting and suggestions for improvement made by healthcare professionals at sentinel workers' health units in Fortaleza, Ceará, Brazil. **Methods:** Quantitative and descriptive study conducted at sentinel workers' health units in Fortaleza, Ceará, from February 2013 through June 2014. An unstructured questionnaire was applied to 78 professionals charged of reporting WA. The collected data were subjected to content analysis. **Results:** As difficulties for reporting WA the participants mentioned: lack of knowledge on how to manage required measures, omission and work overload. Suggestions to improve reporting included health continuing education and divulgation of protocols. **Conclusion:** The results of the present study point to the relevance of training as a means to enhance reporting and to orient professionals on how to fill report forms in order to reduce underreporting. **Keywords |** accidents, occupational; mandatory reporting; occupational health; education, continuing.

RESUMO | Introdução: A notificação de acidente de trabalho (AT) é hoje um importante instrumento para a saúde pública, pois a partir dela se tem real conhecimento sobre a situação dos trabalhadores atendidos pelo Sistema Único de Saúde (SUS). **Objetivo:** Analisar dificuldades e sugestões dos profissionais de saúde sobre a notificação compulsória de AT em unidades sentinela em saúde do trabalhador, no município de Fortaleza, Ceará. **Métodos:** Estudo quantitativo de cunho descritivo, realizado em unidades sentinela em saúde do trabalhador, no município de Fortaleza, Ceará, no período de fevereiro de 2013 a junho de 2014. Foram aplicados 78 questionários não estruturados aos profissionais responsáveis pela notificação de AT. A exploração dos dados obtidos foi pautada na Análise de Conteúdo. **Resultados:** As dificuldades encontradas pelos profissionais como impedimento para a não notificação foram: falta de conhecimento quanto ao manejo de medidas a serem tomadas, omissão e sobrecarga de trabalho. Foram citadas como sugestões: educação permanente em saúde (EPS) e divulgação de protocolos. **Conclusão:** Com os resultados obtidos pelo presente artigo, fica evidente a importância da capacitação dos profissionais de saúde, incentivando a realização das notificações e orientando tais profissionais para o correto preenchimento da ficha de notificação, a fim de diminuir a subnotificação do agravo.

Palavras-chave | acidentes de trabalho; notificação compulsória; saúde do trabalhador; educação continuada.

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INTRODUCTION

Work accidents (WA) are a significant public health problem as a function of their high incidence and impact on morbidity and mortality. Article 19 of Law 8,213, from 24 July 1991, defines WA as:

The ones which occur in the course of work leading to body injury or functional disorders which cause death, loss or permanent or transient reduction of work ability. They also comprise events on the worker's way from home to work and vice versa¹.

According to the International Labor Organization (ILO) about 321,000 people die by WA every year, and 160 million people develop non-fatal occupational diseases². The annual cost of medical visits, medication, rehabilitation, leaves of absence and retirement is estimated as USD 2.8 trillions. In Brazil, these factors account for more than 60% of the benefits paid by the Social Security administration³⁻⁵.

Considering the aforementioned aspects and the need to standardize the procedures for mandatory reporting of WA within the Unified Health System (Sistema Único de Saúde — SUS) WA were included in the national list of diseases and other conditions to be monitored through surveillance at sentinel units⁶.

Due to the negative impacts of WA, ambitious strategies are being developed to overcome the problems derived from underreporting⁷. One such strategies is the National Integrated Workers' Health Care Network (Rede Nacional de Atenção Integral à Saúde do Trabalhador — RENAST) created in 2002 and linked to mandatory WA reporting by units enrolled with the Sentinel Work Accident and Work-Related Diseases Mandatory Reporting Network, established in the Ministry of Health Administrative Ruling GM/777, article 2, from 2004⁸.

According to Administrative Ruling no. 204, from 17 February 2016, the sentinel surveillance model is based on health services considered strategic for the surveillance of morbidity, mortality and etiologic agents of interest within the public health setting. The aim of health services accredited as "sentinel units" is to monitor relevant indices that provide early warnings to the workers' health surveillance system⁹.

Sentinel units are further charged of the diagnosis, treatment and reporting of work-related diseases, being categorized per type of reported conditions¹⁰.

Currently, WA reporting is a relevant public health instrument. Within the sentinel network, reporting is made by means of Severe Accidents Reporting Forms, System of Information for Notifiable Conditions (Sistema de Informações e Agravos e Notificações — SINAN) which covers all workers independently from their employment relationship^{11,12}.

Countless factors contribute to underreporting WA within the SUS sentinel network. Some such factors are: fragmentation of information systems, particularly the ones for workers' health; poor acquaintance of the involved professionals with the instruments used for reporting; large numbers of workers without stable employment relationship, resulting in high turnover at health units; and lack of continuing education support¹³⁻¹⁵.

The aim of the present study was to detect difficulties and gather suggestions on mandatory WA reporting at workers' health sentinel units in Fortaleza, Ceará, Brazil, from the perspective of healthcare professionals

METHODS

The present study is a part of a larger research project entitled *Surveillance accidents and violence: factors related to underreporting within the SUS network in Fortaleza-CE* performed from February 2013 through June 2014. The study had a descriptive quantitative design, as the quantitative approach proved to be more adequate to the study aims.

Along the study period, there were seven secondary and tertiary sentinel units in Fortaleza accredited to report severe and fatal work-related accidents through an agreement with the Bipartite Inter-manager Committee (Comissão Intergestores Bipartite — CIB). Establishment of sentinel service networks is a strategy to decentralize SUS actions. The five units with the largest healthcare demand were selected for questionnaire application.

The inclusion criterion for unit selection was: 24/7 availability of outpatient and emergency care. The following five units met this criterion: Doctor José Frota Institute, General Hospital of Fortaleza, Evandro Aires de Moura

District Hospital, Maria José Barroso de Oliveira District Hospital and Governor Gonzaga Mota District Hospital. The criteria for selection of professionals were: complete higher education and being involved in direct care delivery to accident victims and/or WA reporting.

An unstructured questionnaire was used for data collection. The questionnaire was applied by 12 field investigators supervised by four tutors (1 tutor per four investigators). All the research team members received 40-hour training delivered by a group of supervisors. The aims of training were to acquaint investigators with the instrument and achieve greater uniformity in its application.

Questionnaires are inquiry tools able to gather information rapidly while ensuring anonymity¹⁶. On these grounds, following explanations on the study confidentiality, the instrument was responded by the members of different teams at the workplace, on variable shifts and days of the week.

Exploratory data analysis was based on the content analysis technique¹⁷ to identify the meaning of the data, followed by inferential analysis to verify the veracity of the information. Content analysis is a research method that involves objective, systematic and quantitative analysis of the content of communication for the purpose of interpretation¹⁷.

The results described here were subjected to inferential analysis and interpretation, seeking to relate simple percentages representing the frequency of elements in narratives to the theoretical-interpretative dimension through analysis of the collected material.

Analysis included encoding the information on difficulties perceived by healthcare professionals and the suggestions they made. The frequency and consistency (exhaustiveness) of the terms found in the responses to the questionnaire were analyzed in theoretical discussions on mandatory reporting of WA, workers' health and health continuing education.

The study was approved by the research ethics committee of Federal University of Ceará, CAAE 11070813.9.0000.5054, ruling no. 237,406. Since the study involved research with human beings, all the procedures complied with Resolution no. 196/96 which was the one in force at the time when the study was conducted. All the participants read and signed an informed consent form.

RESULTS

Seventy-eight healthcare professionals were interviewed at the five selected units. Most were nursing professionals (48.0%), female (78.0%), had worked in the healthcare sector for 15 to 20 years (52.0%) and were aged 31 to 40 years old (29.5%). The median number of years since graduation from high education was 16 to 21 (50.0%). About 44.0% of the participants reported to have attended training on WA, and 44.0% to have already reported WA.

Quantitative analysis of the responses to the questionnaire allowed establishing two categories:

- I: main difficulties to report WA;
- II: suggestions to improve WA reporting.

CATEGORY I: MAIN DIFFICULTIES TO REPORT WORK ACCIDENTS

Twenty participants did not respond this item. The main difficulty, reported by 47.0% of the participants, was lack of knowledge on how to handle WA or what measures should be adopted, followed by omission (12.0%) and work overload (Table 1).

Lack of a clear protocol at the units also contributed to poor-quality reporting, and was mentioned by the participants as a difficulty. Some participants mentioned lack of the necessary materials, as e.g. SINAN report forms, which made impossible for them to report occurrences (Table 2).

Several factors are relevant for adequate reporting, such as technical-scientific knowledge, human resources adequate to the service characteristics and continuing training. The suggestions made by the participants to improve mandatory WA reporting are described in the table discussed below.

CATEGORY II: SUGGESTIONS TO IMPROVE WORK ACCIDENT REPORTING

Health continuing education (HCE) was suggested by 65.0% of the sample (Table 3). Wider divulgation of the steps to follow facing WA was also mentioned.

As they had stated upon describing difficulties, in their suggestions all the participants stressed the need for greater support to receive the training needed to overcome the lack of knowledge exhibited by professionals (Table 4).

DISCUSSION

Since work-related health problems are complex, support from other SUS areas related to notification of diseases and other events is necessary. These indicators are relevant guides for the formulation of policies and programs targeting workers' health, increasing knowledge and defining the process and flow for reporting outcomes and continuing training.

According to Rodrigues et al.¹⁸, practical, concise and efficient protocols contribute to effective reporting by enhancing

compliance with norms and adherence to processes. Having healthcare professional report events is relevant, because the resulting information contributes to the identification of possible hazards and vulnerabilities in the workplace. Thus reporting is useful for the planning of public actions for prevention of WA and promotion of safety measures¹⁹.

On occasions, healthcare professionals fail to report events for not having assimilated the corresponding information. This suggests they might have not understood the relevance of reporting, resulting in difficulties, or makes evident its non-mandatory nature, whereby the purpose of reporting is not taken into account, leading to underreporting.

Underreporting reflects the scarce knowledge of healthcare professionals on how to behave vis-à-vis WA and on

Table 1. Main difficulties to report work accidents, Fortaleza, 2013-2014 (n=78).

Categories	n	%
Lack of knowledge	27	47,0
Omission	7	12,0
Work overload	6	10,0
Lack of materials	6	10,0
Lack of information	3	5,0
Lack of management	2	3,0
Spontaneous demand	2	3,0
Lack of management	1	2,0
Lack of personnel	1	2,0
No difficulty	1	2,0
All the cited difficulties	1	2,0
Attributed value	1	2,0

Table 3. Main suggestions to improve work accident reporting, Fortaleza, 2013-2014 (n=78).

Categories	n	%
Continuing education	51	65,0
Divulagation of protocols	13	16,0
Lack of materials	3	4,0
Management	3	4,0
Bureaucracy	2	3,0
Work environment	2	3,0
Reporting	2	3,0
Statistics	1	1,0
Professionals	1	1,0

Table 2. Main difficulties met by professionals upon reporting work accidents at sentinel units, Fortaleza, 2013-2014 (n=78).

Participant	Response
Physician 2	"There is no process of information on measures and protocol."
Physician 12	"Disinformation; lack of courses or incentive for reporting."
Nurse 13	"Lack of knowledge of professionals on the severity; The victim refuses to perform exams."
Nurse 16	"Report forms sometimes lack."
Social Worker 2	"Lack of information on what to do about work accidents involving myself or another healthcare worker."
Social Worker 3	"Lack of knowledge about the subject."
Pharmacist 1	"Lack of knowledge."
Pharmacist 2	"Lack of forms."
Nutritionist1	"Lack of knowledge."
Physical/Occupational therapist 1	"Most healthcare professionals are unprepared."
Physical/Occupational therapist 4	"Lack of information."

how to properly fill report forms²⁰. Therefore, they need to receive training by means of HCE actions²¹.

The results of the present study evidence the difficulties met by professionals responsible for reporting WA at healthcare units. It is worth emphasizing that the participants observed they were not trained to report WA properly. Moreover, the training effectively received was not able to correct considerable flaws, since HCE was the main suggestion made by 65.0% of the participants.

The diversity among the participants was a relevant factor, which made possible the construction of perception which has made possible the same theme interdisciplinary work and aligning the mentioned difficulties and suggestions. This situation corroborates the idea that HCE promotes constructing knowledge with interdisciplinary links by prioritizing the teaching-learning relationship at healthcare services based on problems derived from concrete reality²².

According to Ceccim and Feuerwerker²³, “HCE contributes [to establish] interfaces, interactions and inter-complementarity among states and municipalities for the construction of a unified health system” (p. 16) through incentives to the processes of production of knowledge about SUS. The decentered and collegiate nature of SUS

management should be thought over as concerns decision making on the training of healthcare professionals.

As was observed, “health continuing education seeks to reunite theory and practice through on-the-job training, thus overcoming the mere development of professional skills²⁴.” On these grounds, the results of the present study point to an urgent need for professional training to improve the quality of work as concerns mandatory WA reporting, when one considers the emphasis given by the participants to their lack of information and poor knowledge about this subject.

As an option to overcome their difficulties, one of the suggestions made by the participants was to reduce their working hours, since this factor behaves as an hindrance to reporting, in addition to being a risk factor for occurrence of WA. Long working hours cause exhaustion, leading to reduced work ability, illnesses and absenteeism, besides increasing the workload of the employees who remain active at services^{25,26}.

The participants’ suggestions strongly pointed to the need for greater support for the training required to fill the gap in knowledge exhibited by professionals. The transcripts in Table 4 evidence the need to qualify healthcare professionals for mandatory reporting through access to the corresponding information, once its relevance within the

Table 4. Main suggestions made by the participants to improve work accident reporting, Fortaleza, 2013-2014 (n=78).

Participant	Response
SW2	“Wide divulgation of the characteristics that define work accidents, in this case, what equipment is indispensable to prevent such accidents at a hospital healthcare unit. In case of an accident, where to seek care (area in charge) and where the accident should be reported. There’s a need to promote communication among services as concerns cases of work accidents at Governor Gonzaga Mota District Hospital.”
SW11	“Discuss more this subject at the workplace.”
Nurse6	“Training; reduce working hours; better working conditions.”
Nurse16	“Information at the service on reporting procedures and forms; train the staff in meetings.”
Pharm1	“Educational campaign, training.”
Pharm2	“Wider divulgation and supply of appropriate personal protective equipment.”
Phys/OccTher1	“Train all healthcare professionals on filling and on the destination of report forms.”
Phys/OccTher4	“Better professional training.”
Speech therapist 1	“Establish [it] at standard at hospitals and healthcare units.”
Psychologist 3	“Professional training. Availability of materials. Implementation of preventive measures.”
Psychologist 10	“Meetings with healthcare professionals; presentation of the specific forms; fixed workflow; more interaction between the social work and emergency departments.”
Psychologist 4	“Wider employee access to information.”
Psychologist 8	“Wider divulgation of this topic and of care facilities.”

public health setting is duly discussed. This process requires both theoretical-practical training and working conditions favorable to the performance of activities.

Independently from their professional category, another suggestion evident in the participants' narratives was to socialize the information on workers' health through dialogue. This dialogue should involve healthcare services and professionals, social control actors and the public policy makers, considering the relevance of promoting intersectoral approaches to meet the healthcare demands.

In addition to instances of incorrect filling, the report form does not provide relevant information. As a result, in-depth epidemiological investigation cannot be performed, with consequent negative impact on planning, since managers depend on epidemiological data to make decisions on healthcare needs.

CONCLUSION

WA are a relevant component of the reality at healthcare services. The present study succeeded in detecting hindrances and possible means to improve reporting and reduce underreporting based on the perception of the healthcare

professionals who work at such services. The reason is that they are the reference for the identification and reporting of cases in everyday practice.

Among the described difficulties to report WA, lack of knowledge on how to manage accidents and on the measures to be adopted, omission and work overload stood out.

HCE and divulgation of protocols were the main suggestions made to correct underreporting. All other suggestions derived from the need of access to information on reporting and of dialogue among healthcare services and professionals, managers, social control actors and the public policy makers.

The discussion of the results of the present study points to the relevance of providing training to healthcare professionals, promote reporting and orient professionals on how to fill the report forms correctly, since when then they are not, SINAN records untrustworthy data.

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