



INTRODUCTION

In Chile, the National Socioeconomic Characterization Survey of 2015 revealed that individuals over 60 years old correspond to 17.5% of the national population, with a marked increasing tendency over the years. Due to this fact, it is necessary to analyze the profile of exposures to chemicals in this age group in order to adopt management measures that contribute to improve their quality of life. The objective of this study was to characterize calls from individuals over 60 years old received by the Poison Control Center of the Pontificia Universidad Católica de Chile (CITUC) during 2006 to 2016.

CALL CHARACTERIZATION PER YEAR

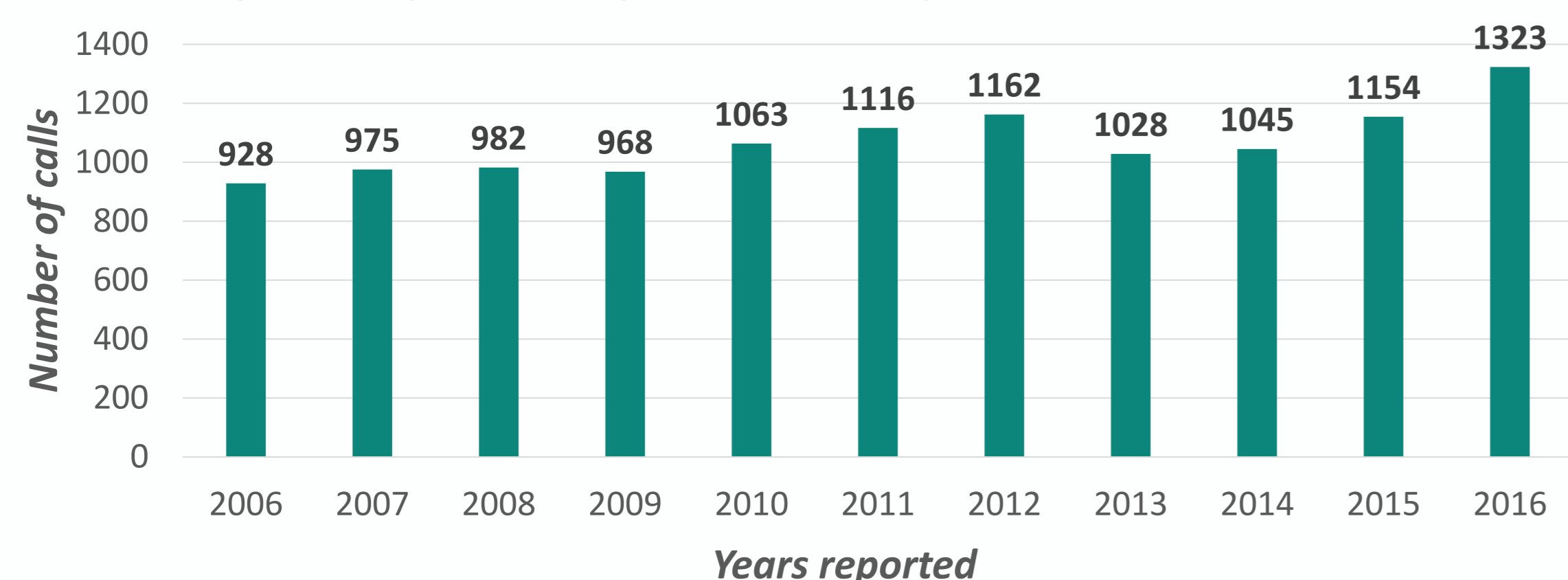


Figure 1: Number of CITUC calls by patients over 60 years. Period 2006-2016. N = 11.744 calls.

MATERIALS AND METHODS

A retrospective descriptive study was carried out considering calls received by the Center between 2006 and 2016 that were systematically stored using INTOX Data Management System. The following variables were analyzed: Age, sex, agent, interlocutor, place of the incident, circumstance of exposure and origin of the call.

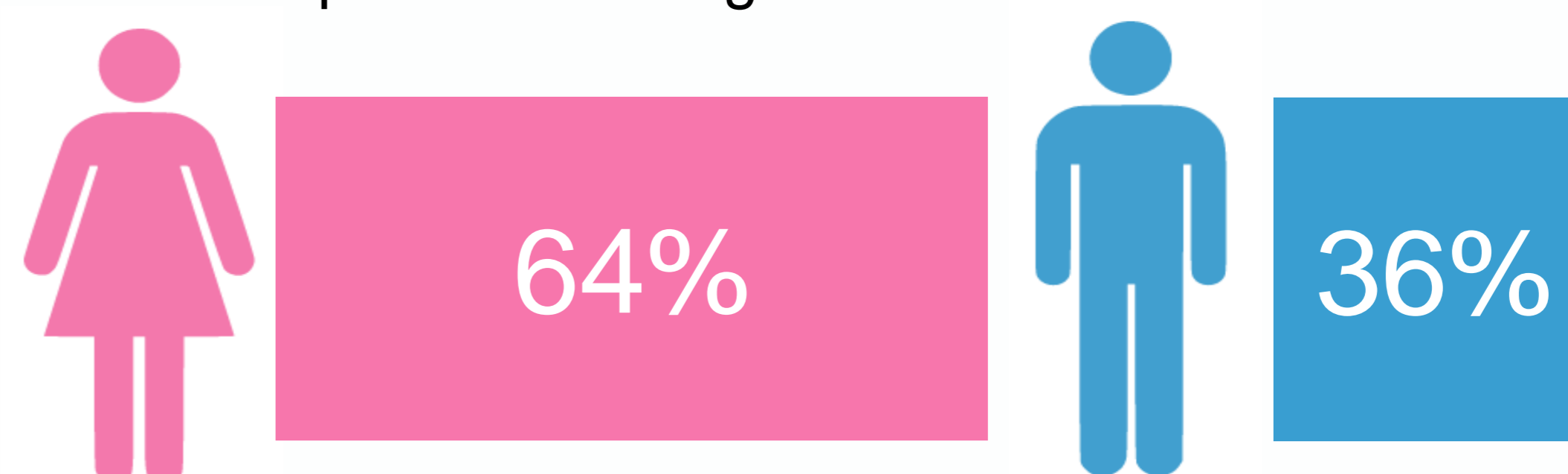


Figure 2: Distribution of exposures by gender. Period 2006-2016. N=11.744 calls.

GENERAL CHARACTERIZATION OF THE AGENTS

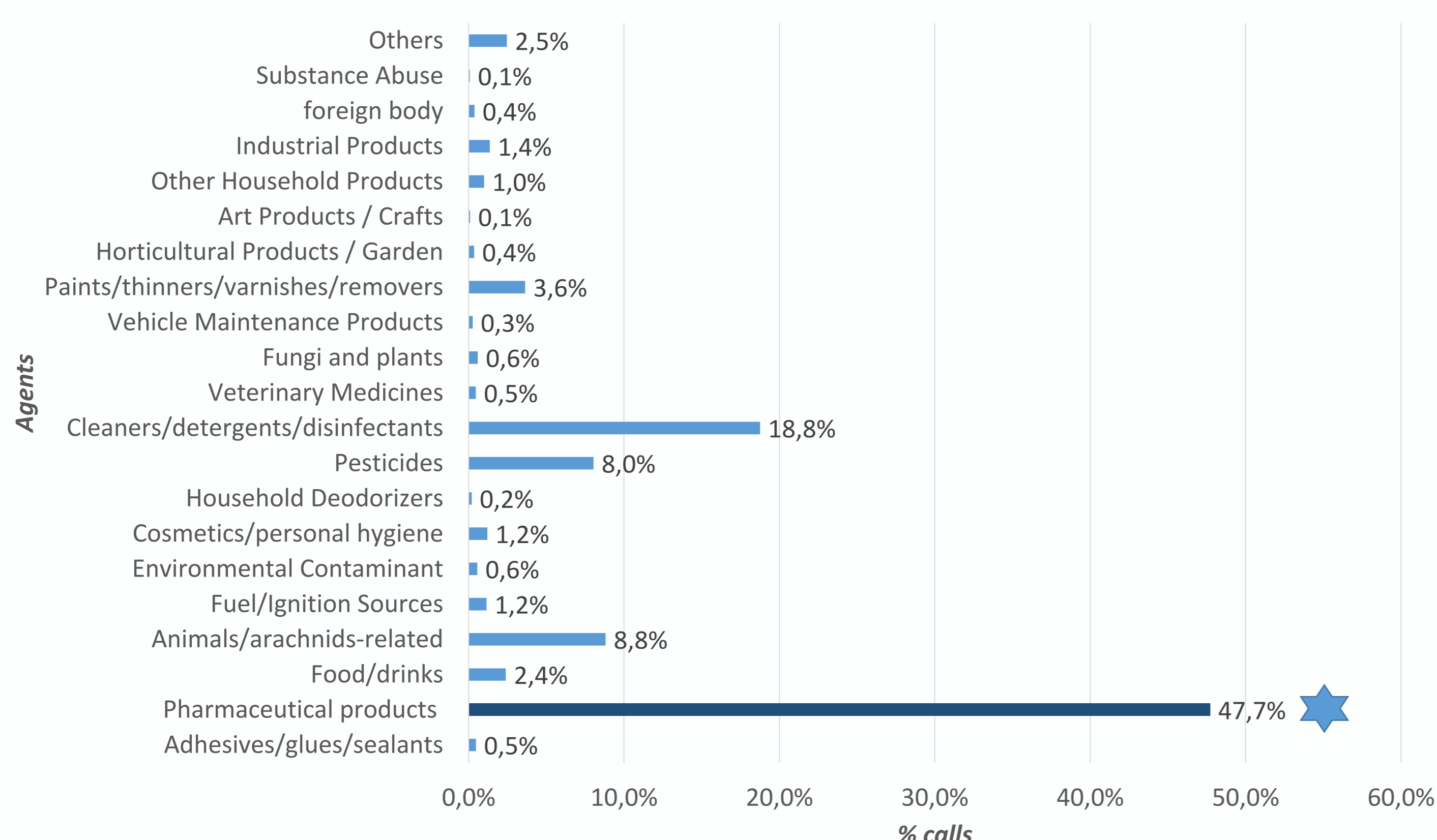


Figure 3: Characterization of the calls according to general category of agent. Period 2006-2016. N= 11.744 calls.

RESULTS

11,744 calls were received over a period of 11 years of study, 64% of them involving females. The mean age of individuals was 70 years. 41% of the calls were accidental exposures, followed by a 17% of therapeutic errors and 14% of intentional suicidal exposures. The main agents involved were pharmaceutical products (47,7%), cleaners/detergents/disinfectants (18,8%) and animals/arachnids-related calls (8,8%). Pharmaceutical products most commonly involved corresponded to neurological agents (52,7%), followed by cardiovascular agents (12,4%) and gastrointestinal and metabolic agents (7,1%). Within the neurological category, anxiolytics represented 26,4%, antidepressants 16,9% and antipsychotics 14,8%. In relation to the intentionality of the exposure, 37,4% (4398 call) correspond to accidental exposure, followed by 18,5% (2178) suicide, and 17% of therapeutic errors (2000). 41% of calls were made by health personnel, followed by 35% corresponding to one family member and 17% victim/patient.

In all suicide intentional exposures, multiple agents were involved. Females exhibited a higher risk of suicidal attempts with pharmaceutical products compared to males and other agents (OR 4.9; IC95% 3.3-7.4; p<0.0001).

PHARMACEUTICAL PRODUCTS

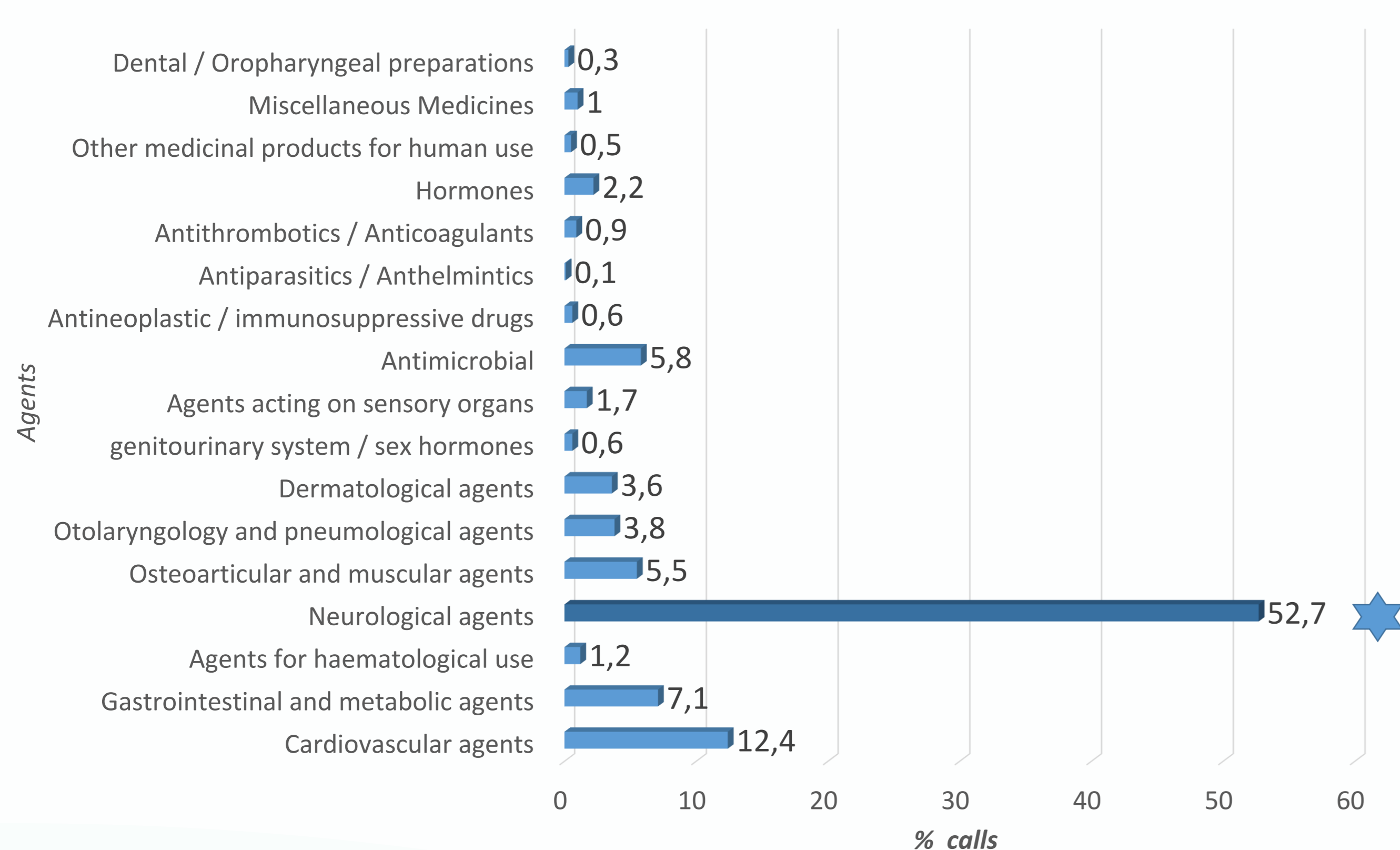


Figure 4: Characterization of pharmaceutical product calls. Period 2006-2016. N= 11.744 calls.

NEUROLOGICALS AGENTS

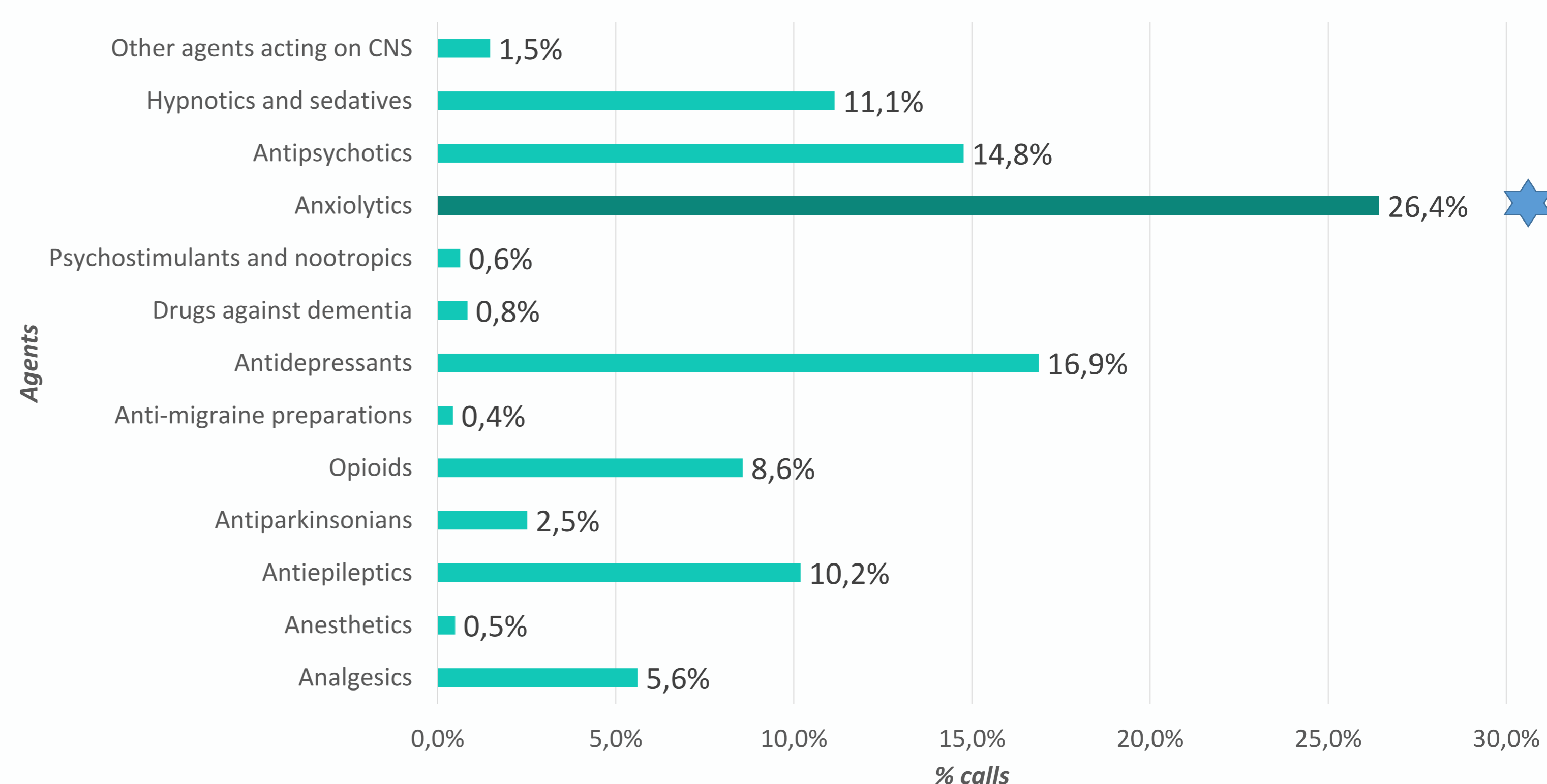


Figure 5: Characterization of the calls by agents of neurological use. Period 2006-2016. N= 11.744 calls.

CONCLUSION

In this study, pharmaceutical products were the most common agent involved. Due to their physiological conditions, this group of age presents particular conditions that may affect metabolism and excretion and likewise the potential effects of pharmaceutical products. Therefore, it is necessary to implement programs aiming to improve the quality of life and reducing sanitary costs.

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