



## BACKGROUND

Traditional medicine is very common in Guatemala, the majority of the rural population and a considerable number of the urban population, depends on it. In Guatemala exists many ethnic groups, who still use plants to cure diseases in the first place because they believe that it is more effective than modern medicine. Large number of society, is against traditional medicine because they feel it is difficult to distinguish between beneficial and superstitious aspects, and only adopts traditional medicine when biomedicine has failed. Lots of Guatemalan people depend on traditional medicine because it is cheaper in comparison with drugs in the pharmacy. The specific knowledge of their healing benefits is restricted to healers, the elder people, or residents who have lived in these areas for a long time (Pöll & Álvarez, 2015).

**Aims:** inventarization of medicinal plants used in traditional medicine in Salamá district, Baja Verapaz department of Guatemala.

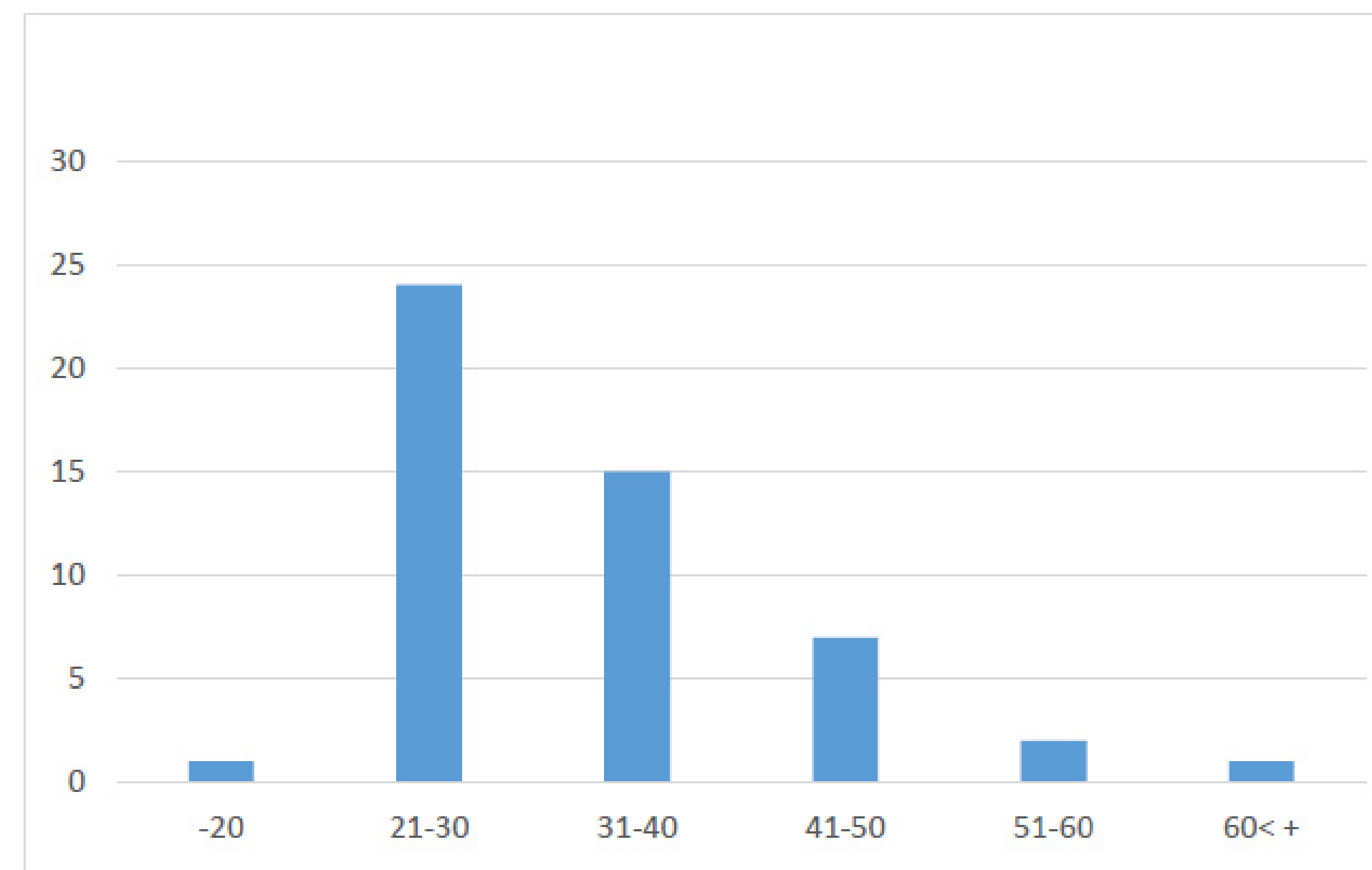
## METHODS

Whole research was done in district in Salamá district, Baja Verapaz department of Guatemala. It lays on the east side of Baja Verapaz. It's high above the sea levels is 940, covers 776 sq km of surface and 40,000 people live here (Figure 1).



**Figure 1** Map of Guatemala with department Baja Verapaz and District Salamá.

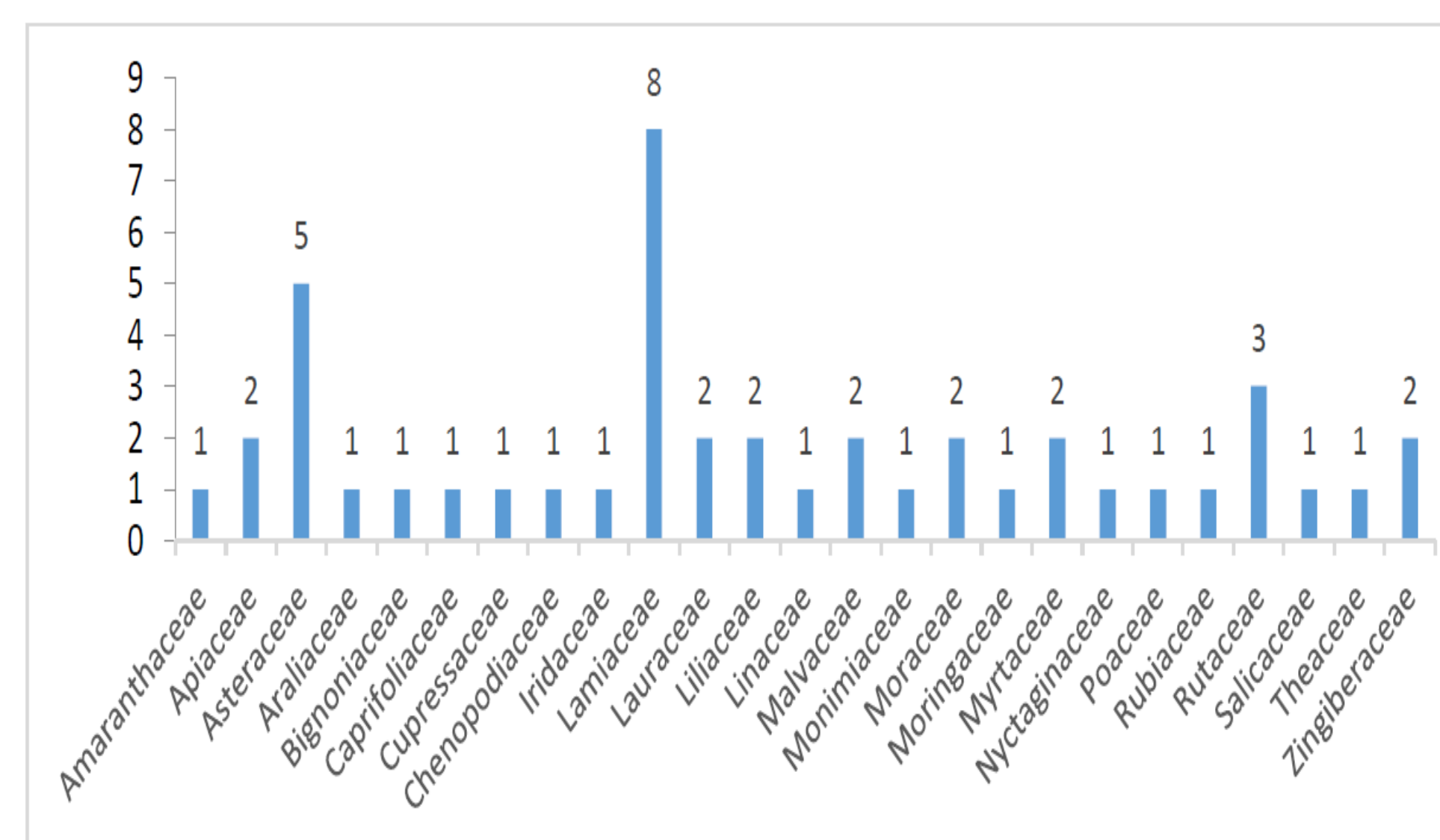
Ethnobotanical data were collected from 50 respondents, 56 % women, 44 % men . The biggest part of respondents is aged from 21 to 30 years and represent 48 % of the total. Next category is 31-40 years of age and this group is represented by 30 % of the responders (Graph 1), the data was collected through semi-open interview and by observations in the fields and speaking with local inhabitants which were randomly selected. The data were evaluated using the following indexes: Use reports, Medicinal use value , Frequency of citation, Relative frequency of citation (RFC) and Fidelity level.



**Graph 1** Distribution of age of the respondents.

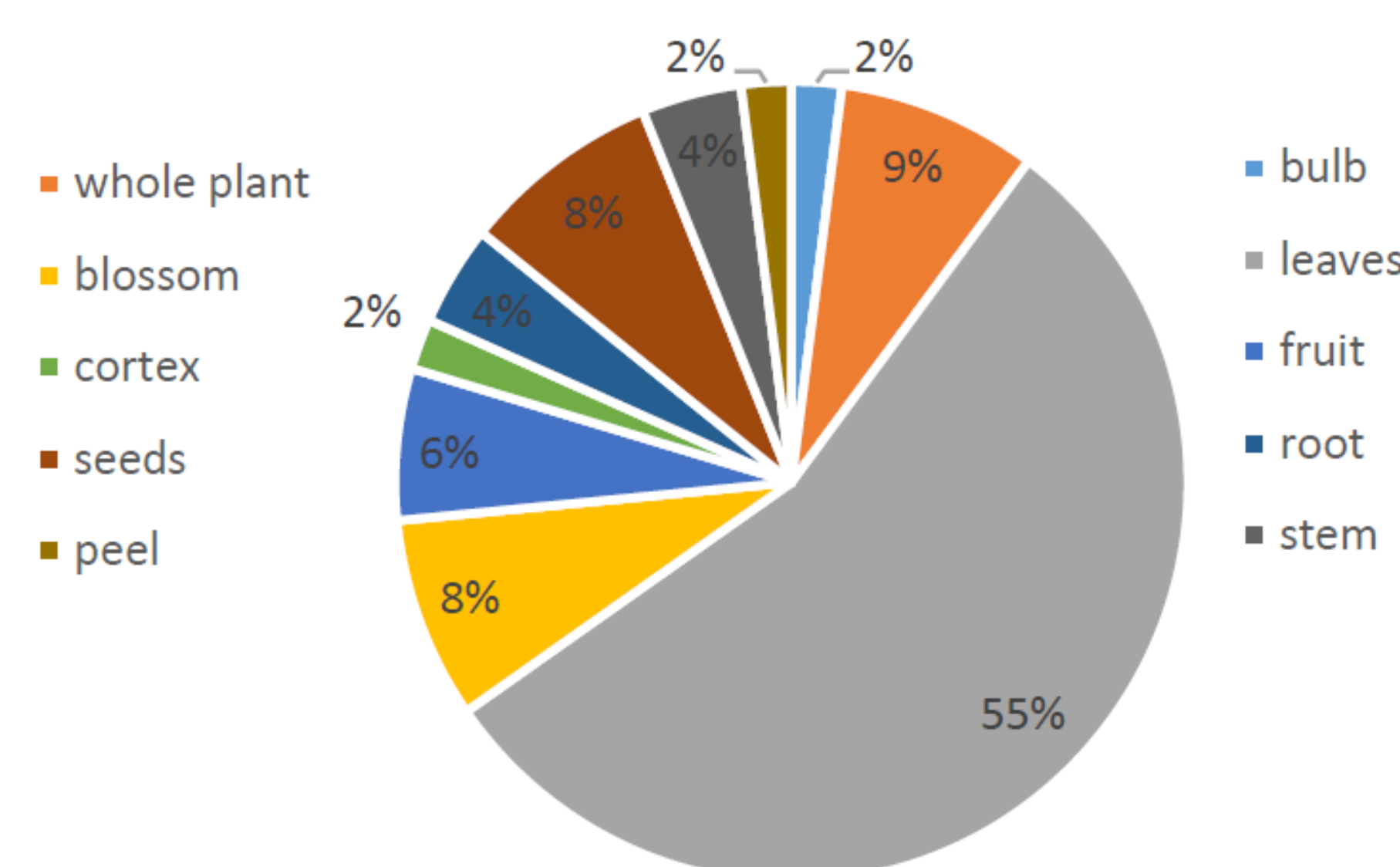
## RESULTS

A total of 44 species belong to 41 genera and 26 botanical families were registered. The most dominant families were Lamiaceae (with 8 species; RU=12), Asteraceae (5; RU=11) and Rutaceae (3; RU=4) (Graph 2). there was also found 21 categories of various diseases treated with medicinal plants, the largest representation was gastrointestinal disorders (76 %) and breathing system problems (47 %).



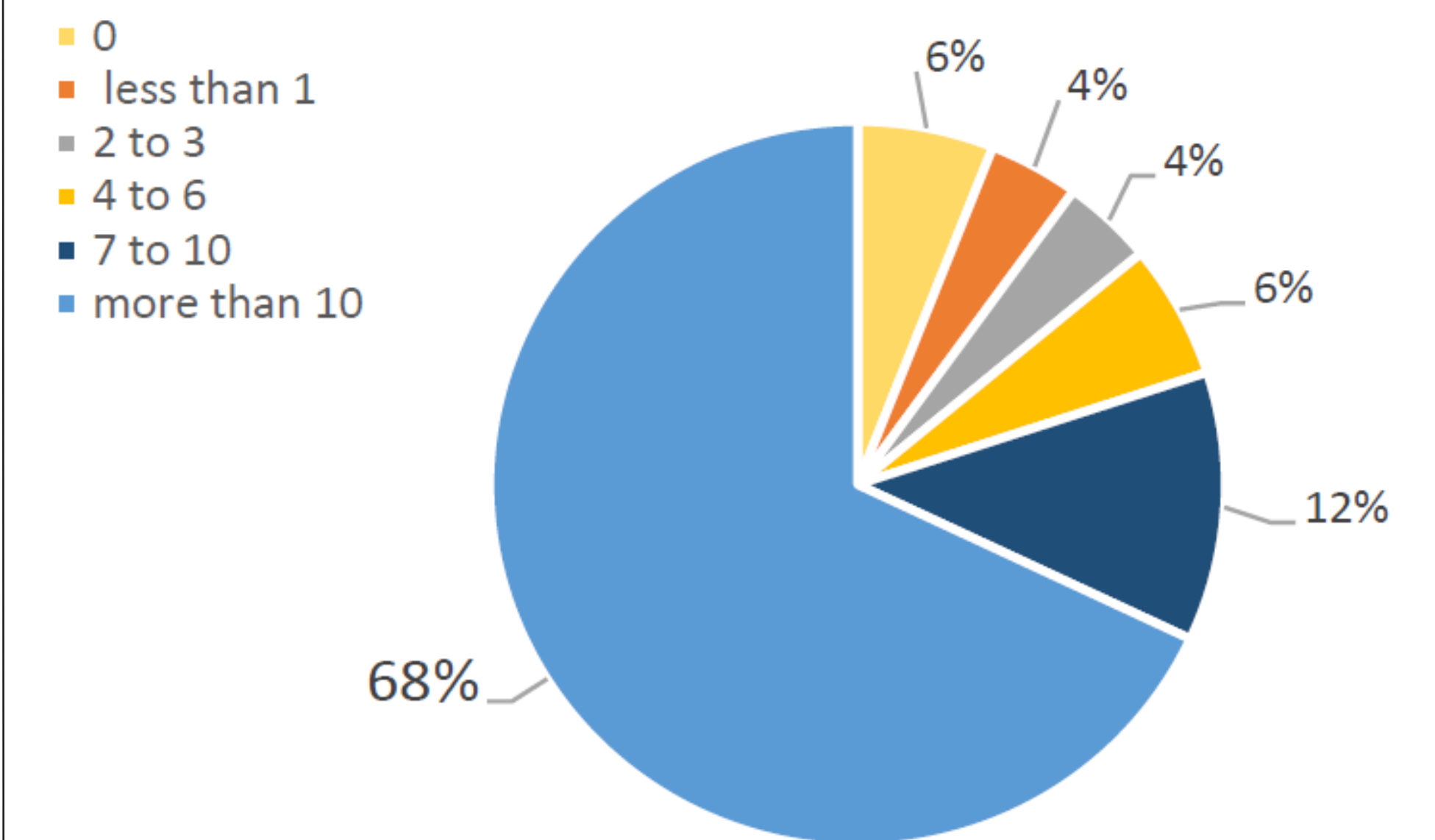
**Graph 2** Botanical families medicinal plants which are used in Salamá, Baja Verapaz, Guatemala.

According to the quantitative data evaluated, *Matricaria chamomilla* was the species of greatest use and importance (UR= 5; RFC= 0.5; MUV= 0.12; FC=26). The most used parts of the plants for the treatment of different diseases were leaves (55 %) (Graph 3), and the used preparation mode was decoction (73 %).

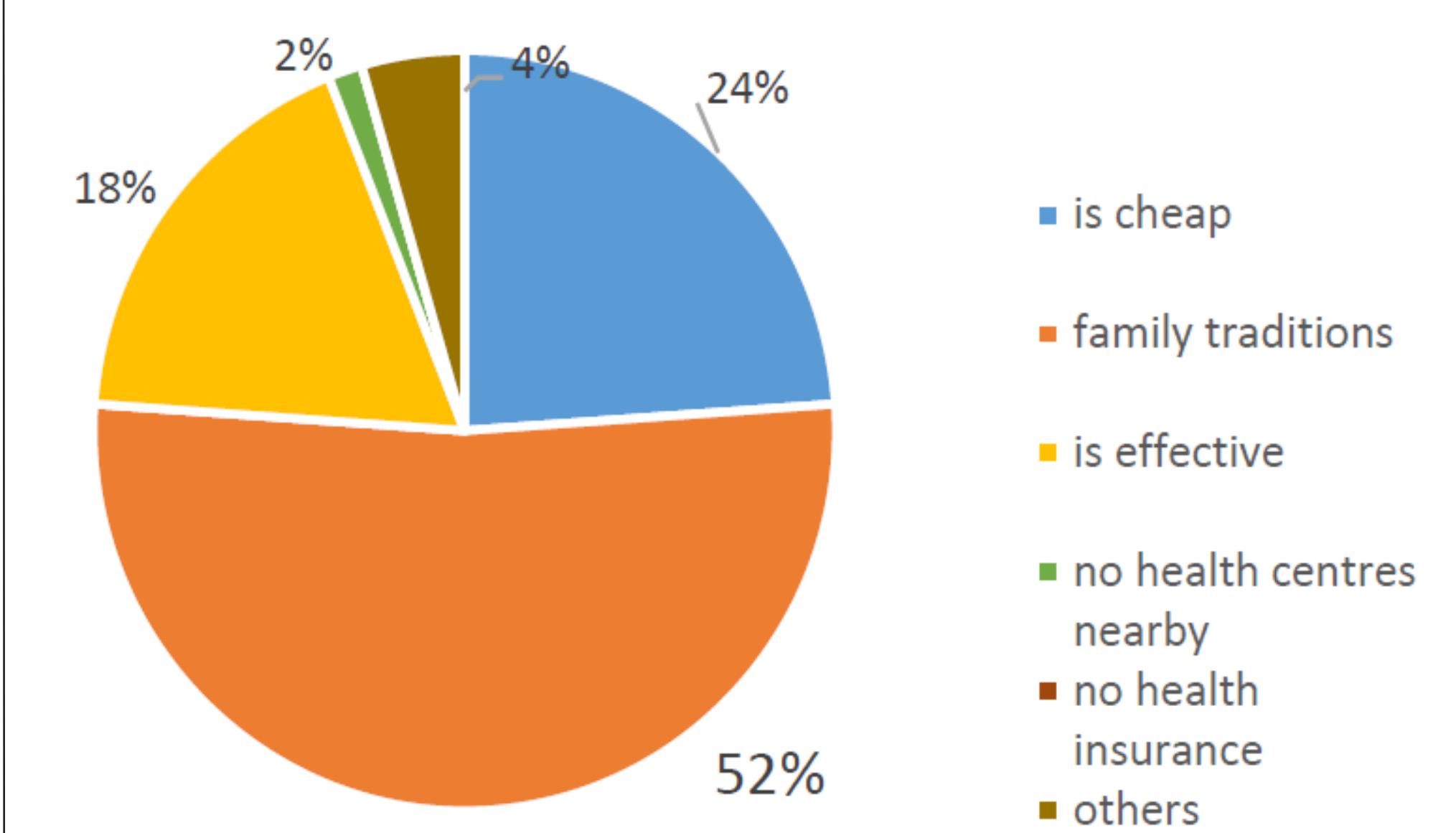


**Graph 3** Used parts of the plants.

Majority of people (88 %) responded to question of how did they start to use traditional medicine was that they started because of their family traditions. 68 % of them said that are using traditional medicine for more than 10 years (Graph 4) and 52% said that it is because of family traditions (Graph 5).



**Graph 4** Distribution of how many years respondent use medicinal plants.



**Graph 5** Reason for using natural medicine.

## CONCLUSIONS

People in middle age living in rural zone carry important knowledge about usage of medicinal plants in traditional medicine. Thanks to this study, knowledge about the use of medicinal plants in traditional medicine in department Baja Verapaz, Salamá district, Guatemala, is recorded.

## REFERENCES

- Ana Lucrecia de MacVean. 2006. Guatemala. Plantas Útiles de Sololá. ISBN 99922-2-279-4
- Cáceres. A. 2009. Vademécum Nacional de Plantas Medicinales. Universidad de San Carlos de Guatemala. Editorial Universitaria. 313 p.
- Gary J. Martin. 2004. Ethnobotany: A Methods Manual. ISBN-10: 1844070840
- Pavel Valíček a kolektiv. 2002. Užitéčné rostliny tropů a subtropů. 2. vydání. Praha: Academia. ISBN 80-200-0939-6
- PÖLL E. & ÁLVAREZ M. R., Plantas autóctonas de Guatemala usadas en medicina tradicional. Guatemala, 2015, Publicación de la Universidad de Valle de Guatemala. ISBN 9789929814400. p. 9-15.

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