Background and significance: Fertility health literacy is a key factor in fertility self-care. Lack of fertility literacy could contribute to subfertility issues and involuntary childlessness. Studies indicate that reproductive age women and men lack adequate and accurate fertility health literacy. Nursing students play a special role in fertility health literacy. They not only need fertility knowledge for themselves, but also for facilitating fertility health literacy among reproductive age populations. However, there are limited studies concerning nursing students’ fertility health literacy in the literature.

Purpose: To examine fertility health literacy among nursing students, and to compare fertility health literacy between undergraduate and graduate level nursing students.

Theoretical base: Fertility literacy is a vital component of health literacy, especially for young men and women of reproductive age. A conceptual framework of fertility literacy was developed based on an expanded health literacy framework by Nielsen-Bohlman, Panzer, & Kindig (2004) and includes four subcategories of knowledge, i.e., female fertility, male fertility, infertility, and lifestyle factors that affect fertility.

Design: A cross-sectional descriptive comparative design.

Methods: A convenience sample of 88 nursing students (56 undergraduate and 32 graduates) was surveyed for their fertility health literacy. The survey was developed based on a literature review of relevant studies. The survey evaluated fertility health literacy in four categories: fertility knowledge for women (6 items), fertility knowledge for men (1 item), infertility knowledge (4 items), and lifestyle factors (10 items). Total fertility literacy score is 21. Descriptive statistics were used to report demographics and fertility literacy. Independent t tests were used to compare fertility literacy differences and planned age for 1st child between undergraduate and graduate students. The significance was determined at p ≤ .05.

Results: The majority of the participants were white (88%) and female (98%). The mean age was 23 (SD = 5.00; range 18-52). The majority of participants (99%) were childless and intended to have children in the future. Fertility literacy scores were generally low (M = 10.92, SD = 2.11, range 4-16). Among the four subcategories of fertility literacy, the mean infertility knowledge score is the lowest (M = 1.09, SD = 0.77, range 0-3). Independent t test showed a significant difference in infertility knowledge score between graduate and undergraduate nursing students (M = .35, SD = .17, CI$_{95}$ 0.02- 0.68). Graduate students also intended to have children at older age compared to undergraduate students (M = 2.28, SD = .50, CI$_{95}$ 1.29-3.28).

Conclusion: Nursing students largely have low fertility health literacy but are well aware of the impact of lifestyle factors on fertility. Nursing students play vital roles both as consumers and educators of fertility health literacy. Fertility health literacy should be incorporated into nursing education.